IMPACT OF COMMUNICATED COMPANY ACCOUNTS DURING VARIOUS CRISES
ON CONSUMER EMOTIONS, ATTITUDES AND BEHAVIOURAL INTENTIONS

Lynette M. McDonald
B.A. (Communication)
Department of Tourism, Leisure, Hotel and Sport Management
Griffith University

Submitted in fulfilment of the requirements of the degree of Doctor of Philosophy
September 30, 2005
IMPACT OF COMMUNICATED COMPANY ACCOUNTS DURING VARIOUS CRISES ON CONSUMER EMOTIONS, ATTITUDES AND BEHAVIOURAL INTENTIONS

Despite the fact that major crises cost companies many millions of dollars in lost sales, damaged reputation, and reduced market share annually, there is little research on consumers’ reactions to company crises. In fact, no research has investigated - from a consumer’s perspective - the range of thoughts, feelings and actions consumers have in response to a product or service crisis. This creates a problem for firms, both in their understanding of how and why consumers react to a crisis, and in their management of the crisis to reduce negative reactions from current and prospective consumers, and therefore minimise negative outcomes for the company.

Following a crisis event, the only tool under organisational control that may influence the crisis outcome by reducing negative reactions from current or prospective consumers of the product or service is the company’s communicated “account” of its role in the crisis. Accounts commonly used by companies during a crisis are “no comment”, “denial”, “justification”, “excuse” and “confession”. However, there are currently few guidelines and empirical investigations indicating the optimum company account to reduce negative consumer reactions to crises. In fact, no crisis researcher has examined the impact of all these company accounts on consumer behaviour.

One crisis researcher (Jorgensen, 1996) using Weiner’s attributional (1986) theory (WAT) found that company accounts (denial, confession) and two different crisis causes impacted consumer anger and behaviour (purchase intention, investment intention). However, although anger was an immediate precursor of negative consumer behaviour, the focus in attribution theory is on attributions, not emotions as drivers of behaviour and attitude. Additionally, WAT limited emotions to anger and sympathy. Therefore, no research has examined either the array of emotions and behaviours consumers of a product or service exhibit during a crisis, or whether different emotions drive particular consumer behaviours and attitude to the company. As well, while Jorgensen (1994, 1996) examined the impact of different crisis causes, or crisis types (internal/controllable and external/uncontrollable), on consumer reactions, and Jorgensen (1994) also investigated a “mixed” or ambiguous crisis, how other crisis types impact consumers has not been examined. Also not investigated is whether each of these crises, that is Locus crisis (internal/external) or Controllability crisis (controllable/uncontrollable) have a differential impact on consumers.
In addition, while WAT refers to personal relevance, it was not included in Weiner’s (1986) model. However, one theory that includes personal relevance, attributions and emotions to explain behavioural and attitudinal reactions to an event is Weiss and Cropanzano’s (1996) Affective Events Theory (AET). Using AET, this thesis investigated the impact of five commonly used company accounts in different crisis types on an array of consumers’ emotions and behavioural intentions and on attitude, as well as on attributions (including foreseeability and intentionality), involvement (i.e., personal relevance), responsibility, and accountability. Further, this thesis examined which emotions acted as drivers of different behavioural intentions.

The research for this thesis comprised three studies using mixed methods in a triangulated design. The first study used focus groups to investigate consumers’ recalled thoughts, feelings and behaviours, and any other factors consumers considered important in various salient company crises. The results showed that consumers recalled a full range of both positive and negative emotions - anger, fear, sadness, joy, surprise and love. Reported behaviours included boycott, switching, avoidance and loyalty. As well as variables that were identified as being congruent with those described in the literature, emergent variables included attitudes to government, media and companies.

The second study pilot tested the operationalisation of the independent variables, Accounts (no comment, denial, excuse, justification, confession) and Crisis types of Locus and Controllability (internal/external, controllable/ambiguous/uncontrollable). Crisis type was operationalised using an airplane crash scenario in order to remain as neutral as possible across various demographic variables.

This between-subject 5 x 2 x 3 factorial design used a student sample (n = 316) randomly allocated to 30 treatments. Results were analysed using MANOVA and showed a main effect for Crisis Type, but no main effect for Accounts and no interaction effect. Follow-up mini pilots tested possible causes of account failure e.g., faulty operationalisation, use of a crash photograph. An extra independent variable, Harm level (high with 33 dead/low with 33 slightly injured), was added and the ambiguous crisis type was removed. A number of dependent variables were tested: emotions, behaviour, attitude as well as involvement, attributions, foreseeability, intentionality, responsibility and accountability. Demographic details were also collected. Scales were tested and adjusted or pared down, and some variables were removed.
The third study used a between-subject factorial 5 x 2 x 2 x 2 design testing the impact of Accounts (no comment, denial, excuse, justification, confession), Crisis types of Locus (internal/external) and Controllability (controllable/uncontrollable), and Harm level (high/low) on consumers’ emotions, behaviour and attitude, as well as involvement, attributions, responsibility and accountability. Demographic details were also collected. A random electoral roll sample (n = 907) was randomly assigned to 40 treatments. Results were analysed using MANOVA and other tests (e.g., ANOVA, multiple regression, confirmatory factor analysis). Results showed a main effect for Accounts and Crisis Types but not for Harm levels, and no interaction between independent variables. For Crisis type, internal crises resulted in significantly higher anger, fear, surprise, disloyalty, responsibility and accountability. External crises resulted in significantly higher joy, loyalty and attitude. Controllable crises resulted in significantly higher anger, fear, complaining, disloyalty, accountability and responsibility. Uncontrollable crises resulted in significantly higher joy, loyalty and attitude. The account of “confession” showed best consumer outcome, followed by “no comment”, while “excuse”, “justification” and “denial” received similarly poor results. “Confession” and “no comment” resulted in lower anger and disloyalty and higher sympathy, loyalty and attitude. Additionally, emotions of fear, anger, and low attitude predicted disloyalty. Anger, attributions and fear predicted complaining. Joy, low fear and low anger levels predicted loyalty.

This thesis made a number of theoretical contributions. To the researcher’s knowledge, this was the first investigation of multiple emotions and behaviours in different crisis types, finding that crisis types impacted a range of consumer emotions and behaviour, as well as attitude. It was also the first study to find that different emotions in crises predicted different behaviours and attitude. It was the first application of constructs of involvement and accountability to company crises. It was also the first crisis study to empirically investigate the impact of demographic variables in a crisis, finding that culture and age impact emotions and behaviour.
This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person, except where due reference is made in the thesis itself.

Lynette M. McDonald
TABLE OF CONTENTS

IMPACT OF COMMUNICATED COMPANY ACCOUNTS DURING VARIOUS CRISES ON CONSUMER EMOTIONS, ATTITUDES AND BEHAVIOURAL INTENTIONS ................................................................. 1

IMPACT OF COMMUNICATED COMPANY ACCOUNTS DURING VARIOUS CRISES ON CONSUMER EMOTIONS, ATTITUDES AND BEHAVIOURAL INTENTIONS ................................................................. 2

TABLE OF CONTENTS ........................................................................................................... 6

INDEX OF TABLES ............................................................................................................ 15

INDEX OF FIGURES ......................................................................................................... 16

A TRIBUTE ........................................................................................................................... 17

PUBLICATIONS FROM THE THESIS .................................................................................. 180

Glossary of Definitions of Main Constructs ......................................................................... 191

CHAPTER 1 – INTRODUCTION ............................................................................................. 1

Background to the Research ................................................................................................. 1

Communicated Company Message ...................................................................................... 4

Use Of Affective Events Theory To Develop A Model .......................................................... 6

Of Consumer Reactions To Corporate Crises .................................................................... 6

Predicting that Success of Company Account Depends on Crisis Cause: ......................... 6

Developing a Crisis Typology ................................................................................................ 6

Other Factors Determining Crisis Outcome ........................................................................ 7

Justification for the Research .............................................................................................. 7

Research Objectives ............................................................................................................ 8

Methodology ........................................................................................................................ 9

Outline of the Thesis .......................................................................................................... 11

Ethical Issues and Bias ....................................................................................................... 11

Limitations .......................................................................................................................... 12
CHAPTER 2 – LITERATURE REVIEW ..................................................................................15

Chapter Outline .............................................................................................................15
Background to the Problem ............................................................................................16
Communicated Organisational Message ....................................................................19
Account Classifications .................................................................................................21
  Results of Studies Linking Company Accounts and Consumer Purchase Intentions ....25
  How do Organisational Accounts Impact Consumer Reactions? .........................32
Using Affective Events Theory as the Basis for a Model of ........................................42
Consumer Reactions to Company Crises ....................................................................42
  Objectives of this Section ..........................................................................................42
  Weiss and Cropanzano’s (1996) Affective Events Theory .........................................43
  Summary of Argument Regarding AET .....................................................................58
  Causal Dimensions as Constituting a “Crisis Typology” ........................................60
  Moderators of Company Accounts ..........................................................................65
  Emotion Mediators And Moderators: Integrating Other Judgments ......................68
  Variables Predicted to Impact Other Variables .........................................................73
Summary of this Chapter ...............................................................................................78
Hypotheses Arising from this Review ...........................................................................81

CHAPTER 3 – PHILOSOPHY AND RESEARCH METHODS ...........................................88

Chapter Outline .............................................................................................................88
Justification for the Epistemology: The Scientific Realism Paradigm .........................88
Research Design ............................................................................................................89
Research Objectives .....................................................................................................91
  Study 1: Focus Groups ..............................................................................................92
  Study 2: Pilot Study ..................................................................................................93
  Study 3 ......................................................................................................................95
  Ethical Matters ..........................................................................................................96
  Conclusion ................................................................................................................96

CHAPTER 4 – STUDY 1 .................................................................................................97

Chapter Outline .............................................................................................................97
Research Questions .......................................................................................................97
Research Design ...........................................................................................................98
  Sample .....................................................................................................................98
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>DEVELOPING THE MEASURING INSTRUMENT</td>
</tr>
<tr>
<td></td>
<td>Chapter Outline .............................................................................</td>
</tr>
<tr>
<td></td>
<td>Background to Developing the Crisis Scenarios ................................</td>
</tr>
<tr>
<td></td>
<td>Scenario Development ....................................................................</td>
</tr>
<tr>
<td></td>
<td>Operationalising Independent Variables ........................................</td>
</tr>
<tr>
<td></td>
<td>Measuring the Dependent Variables ...............................................</td>
</tr>
<tr>
<td></td>
<td>Involvement Measures .....................................................................</td>
</tr>
<tr>
<td></td>
<td>Manipulation Check for Crisis Cause .............................................</td>
</tr>
<tr>
<td></td>
<td>Measure for Causal Attributions ..................................................</td>
</tr>
<tr>
<td></td>
<td>Measuring Attributions of Foreseeability and Intentionality, and Accountability</td>
</tr>
<tr>
<td></td>
<td>Measuring Responsibility ................................................................</td>
</tr>
<tr>
<td></td>
<td>Measuring Emotions .......................................................................</td>
</tr>
<tr>
<td></td>
<td>Measuring Behavioural Intentions ...................................................</td>
</tr>
<tr>
<td></td>
<td>Measuring Attitude to the Company ...............................................</td>
</tr>
<tr>
<td></td>
<td>Measuring Factors That Were Controlled .........................................</td>
</tr>
<tr>
<td></td>
<td>Measuring Demographic Variables – Gender, Age, Income, Education, Culture</td>
</tr>
<tr>
<td></td>
<td>Controlling for Other Variables ...................................................</td>
</tr>
<tr>
<td></td>
<td>Final Questionnaire Structure ........................................................</td>
</tr>
<tr>
<td>6</td>
<td>STUDY 2</td>
</tr>
<tr>
<td></td>
<td>Chapter Outline .............................................................................</td>
</tr>
<tr>
<td></td>
<td>Research Design ............................................................................</td>
</tr>
<tr>
<td></td>
<td>The Sample ....................................................................................</td>
</tr>
<tr>
<td></td>
<td>Graphical Examination of the Data ................................................</td>
</tr>
<tr>
<td></td>
<td>Missing Data ..................................................................................</td>
</tr>
<tr>
<td></td>
<td>Checking Univariate Assumptions ...................................................</td>
</tr>
<tr>
<td></td>
<td>Questionnaire Factor Analysis – Exploratory ....................................</td>
</tr>
</tbody>
</table>
Assumptions Underlying Multivariate Testing ................................................................. 173
  Sample size and group size .......................................................................................... 173
  Checking multivariate normality .................................................................................. 173
  Testing Carried Out ...................................................................................................... 175
Summary Of Results and Recommended Changes to the Questionnaire for the Study 3
  and Further Testing ..................................................................................................... 186
Pilot 2: Adjustment and Testing of Account ................................................................ 187
  Assumptions of Normality ............................................................................................ 188
  Summated Scales ......................................................................................................... 188
  Testing Manipulation Checks ...................................................................................... 189
  Testing for Impact of Independent Variables .............................................................. 191
  Discussion ..................................................................................................................... 192
Pilot 3: Accounts and Manipulation Check Testing ..................................................... 195
  Discussion ..................................................................................................................... 200
Pilot 4: Testing of Injury Level, Photograph Impact and Account Manipulation Check .. 200
  Testing the Scenario .................................................................................................... 201
  Impact of Photograph Use on Level of Harm .............................................................. 201
  Discussion ..................................................................................................................... 205
Summary of Changes Resulting from Study 2 – Pilots 1, 2, 3, 4. ................................. 206
  Changes to the Independent Variables ....................................................................... 206
  Changes and Additions to Manipulation Checks ......................................................... 208
  Changes to the Dependent Variables ......................................................................... 209
  Limitations ................................................................................................................... 210
  Issues of Validity, Reliability and Rigour ................................................................. 210

CHAPTER 7 – STUDY 3 ................................................................................................. 212

  Chapter Outline ......................................................................................................... 212
  Research Design ......................................................................................................... 212
  Measuring Instrument ................................................................................................. 213
  Sampling ...................................................................................................................... 215
  Random Sampling Design ........................................................................................ 215
  The Mail-Out Design And Response ....................................................................... 217
  Respondents ................................................................................................................ 218
  Graphical Examination Of The Data ........................................................................ 218
  Missing Data ............................................................................................................... 218
  Checking Univariate Assumptions Of Normality ....................................................... 219
  Questionnaire Factor Analysis – Exploratory and Confirmatory .............................. 220
Appendix 6.13 Pilot 2: Credibility Scale .................................................................400
Appendix 6.14 Pilot 2: New Crisis Type Story with Adjustments ..................401
Appendix 6.15 Pilot 2 Assumptions of Normality ............................................402
Appendix 6.16 Pilot 2: Creation of a New Word-of-mouth Scale ...................403
Appendix 6.17 Pilot 2: Means Plot for Credibility of Accounts .....................406
Appendix 6.18 Pilot 3: Adjusted Accounts for Confession .............................407
Appendix 6.19 Pilot 3: Adjusted and New Manipulation Checks for Accounts ....409
Appendix 6.20 Pilot 3 Means Plots for Accounts .............................................410
Appendix 6.21 Pilot 4: Low Injury No-photograph Treatment Condition .......412
Appendix 6.22 Pilot 4: Account Manipulation Check Expanded from Pilot 3 ....413
Appendix 6.23 Pilot 4: Means Plots for Impact of Photograph Use on TwoHarm Levels414
Appendix 6.24 Pilot 4: Means Plots for Accounts Against the Manipulation Check ....415
Appendix 6.25 Summary Explanation of Changes to the Questionnaire ..........417

Chapter 7 – Study 3 Appendices ....................................................................418
Appendix 7.1 Evaluation of Attitude Scales .....................................................418
Appendix 7.2 The New Items for the Negative Word-of-Mouth Scale ............420
Appendix 7.3 Brisbane Electoral Districts .......................................................421
Appendix 7.4 Example of Randomised Number Selection for Electorates – this for the Albert Electorate .................................................................422
Appendix 7.5 Comparison of Respondents to Demographics of Brisbane Population ...423
Appendix 7.6 Univariate Assumptions For Each Variable ..............................425
Appendix 7.7 Factor Analysis – Exploratory ..................................................432
Appendix 7.8. CFA of Items and Scale Reliabilities .......................................435
Appendix 7.9 Crisis Type and Manipulation Check .........................................456
Appendix 7.10 Means Plots for the Manipulation Check for Accounts ..........458
Appendix 7.11 Further Details on the 1-item Account Manipulation Check .......462
Appendix 7.12 Means Plot Showing Credibility of Accounts .........................463
Appendix 7.13 Box Plot Showing the IV of Harm Tested against Perceived Injury Levels 464
Appendix 7.14 Means Plots Indicating Impact of Account on Dependent Variables ....465
Appendix 7.15 Demographic Variables .........................................................468
Appendix 7.16 Demographic Variables .........................................................470
Appendix 17.7 Interaction effects for Account and Credibility .......................473

REFERENCES ..................................................................................................477
INDEX OF TABLES

IMPACT OF COMMUNICATED COMPANY ACCOUNTS DURING VARIOUS CRISES ON CONSUMER EMOTIONS, ATTITUDES AND BEHAVIOURAL INTENTIONS .......................................................... 1

IMPACT OF COMMUNICATED COMPANY ACCOUNTS DURING VARIOUS CRISES ON CONSUMER EMOTIONS, ATTITUDES AND BEHAVIOURAL INTENTIONS .......................................................... 2

TABLE OF CONTENTS ................................................................. 6

INDEX OF TABLES ..................................................................... 7

INDEX OF FIGURES .................................................................. 34

A TRIBUTE ............................................................................... 35

PUBLICATIONS FROM THE THESIS ............................................ 36

1. Refereed book chapter ................................................................ 36
2. Refereed journal articles .......................................................... 36
3. Refereed conference papers ..................................................... 36
Awards 36

Glossary of Definitions of Main Constructs ............................... 37

Accountability ..................................................................... 37
Accounts 37
Attitude 37
Attributions ........................................................................ 37
Behaviour 37
Causal conditions or dimensions .............................................. 37
Company crises .................................................................... 38
Credibility of message and source .......................................... 38
Crisis types .......................................................................... 38
Emotions ............................................................................. 38
Foreseeability ...................................................................... 38
Harm ................................................................................. 39
Intentionality ...................................................................... 39
Involvement ......................................................................... 39
Primary appraisal ................................................................. 39
Reputation 39
Responsibility ...................................................................... 39
CHAPTER 1 – INTRODUCTION .................................................................1

Background to the Research ................................................................1

Communicated Company Message .........................................................4

Accounts ....................................................................................................4

Accounts Impact Consumer Reactions to Crises ....................................5

Use Of Affective Events Theory To Develop A Model ...............................6

Of Consumer Reactions To Corporate Crises ..........................................6

Predicting that Success of Company Account Depends on Crisis Cause: .................................6

Developing a Crisis Typology ................................................................6

Other Factors Determining Crisis Outcome ..............................................7

Justification for the Research ....................................................................7

Research Objectives ................................................................................8

Methodology ............................................................................................9

Outline of the Thesis ................................................................................11

Ethical Issues and Bias ............................................................................11

Limitations ...............................................................................................12

Contribution ............................................................................................13

CHAPTER 2 – LITERATURE REVIEW ......................................................15

Chapter Outline ......................................................................................15

Background to the Problem ......................................................................16

Communicated Organisational Message ..................................................19

Account Classifications ...........................................................................21

Silence or “No Comment” ........................................................................21

Denial .................................................................................................22

Excuses ..................................................................................................23

Justifications ..........................................................................................23

Confession ..............................................................................................24

Account Summary ..................................................................................25

Results of Studies Linking Company Accounts and Consumer Purchase Intentions .....................25

A Consumer-Preferred Account Hierarchy ..............................................28

Product Recall Studies ..........................................................................30

How do Organisational Accounts Impact Consumer Reactions? ...............................................32

Accounts, Attitudes and Purchase Intents .................................................32

Weiner’s Attribution Theory (1986, 1995b) ...............................................34

An explanation of attribution theory. ......................................................34
Application of WAT to Studies on Company Crises and Service Failure: Establishing the Link Between
Attributions, Anger and Purchase Intentions .................................................................36
Ambiguous causes. ........................................................................................................37
Summary of Company Failure Studies Using WAT .....................................................38
Anger as a Mediator between Company Accounts and Purchase Intentions ..............39
Jorgensen’s (1996) study. ...............................................................................................39
Limitations of Jorgensen’s (1996) model. ....................................................................40
Limitations of Weiner’s Attribution Theory Applied to Company Crises .................41
Using Affective Events Theory as the Basis for a Model of ........................................42
Consumer Reactions to Company Crises ....................................................................42
Objectives of this Section ..............................................................................................42
Weiss and Cropanzano’s (1996) Affective Events Theory ........................................43
AET and Appraisal Theories .........................................................................................44
AET’s application of appraisal theory. ..........................................................................46
AET and primary appraisal. ..........................................................................................47
Limitations of goal theory applied to a company crisis. .................................................47
Applying Involvement to the Model ............................................................................47
AET and Secondary Appraisal ......................................................................................51
Application of Weiner’s Attribution Theory (1986, 1995b) to secondary appraisal. .....51
AET and Affective Reactions – Emotion and Mood .....................................................51
AET and Emotion. ..........................................................................................................52
Application to the Model. ............................................................................................53
Affect and Time – Emotion Episodes ..........................................................................54
AET: Affect-driven Behaviour .......................................................................................54
Application of affect-driven behaviour to the model. ................................................55
AET and Attitude ..........................................................................................................56
Application of attitude to the model. ...........................................................................56
AET and Affective Predispositions ...............................................................................56
Application to the model. ............................................................................................57
AET and Affective Reactions – Mood .........................................................................57
AET and mood. .............................................................................................................57
Application to the Model ............................................................................................57
Summary of Argument Regarding AET .......................................................................58
Causal Dimensions as Constituting a “Crisis Typology” ..........................................60
Causal Condition and Accounts .................................................................................61
Summary of Crisis Typology .......................................................................................65
Moderators of Company Accounts ................................................................. 65
  Credibility of Message and Source ............................................................. 66
  Company Reputation .................................................................................. 67

Emotion Mediators And Moderators: Integrating Other Judgments .......... 68
  Responsibility ............................................................................................ 68
  Intentionality .............................................................................................. 68
  Foreseeability ............................................................................................ 69
  Accountability ............................................................................................ 70
    Applying accountability to organisational crises ......................................... 71
    Accountability theories. .......................................................................... 72
  Consumer Harm and Injury ........................................................................ 72
  Product Usage ............................................................................................. 73

Variables Predicted to Impact Other Variables ........................................... 73
  Education and Income .............................................................................. 74
    Age ......................................................................................................... 74
    Gender ................................................................................................... 74
    Culture .................................................................................................... 75
      Culture affects emotions. ..................................................................... 76
      Culture affects behaviour. ................................................................... 77
      Culture affects attributions. ................................................................. 77
      Culture summary. ................................................................................ 78

Summary of this Chapter ............................................................................. 78

Hypotheses Arising from this Review .......................................................... 81
  Hypothesis 1: Accounts and Crisis type (interaction effect) Impact on Emotions, Behaviour Attitude, Responsibility, Accountability and Attributions of Foreseeability and Intentionality. ........................................ 81
  Hypothesis 2: Accounts Impacting Emotions (main effect) ......................... 82
  Hypothesis 3: Accounts Impacting Behavioural intention (main effect) ........ 82
  Hypothesis 4: Accounts Impacting Attitude (main effect) ........................... 82
  Hypothesis 5: Account and Attributions of Foreseeability and Intentionality and Judgments of Responsibility and Accountability .................................................. 83
  Hypothesis 6: Crisis types Impacting Emotions (a main effect) .................... 83
  Hypothesis 7: Crisis types Impacting Behaviour (a main effect) ................... 83
  Hypothesis 8: Crisis Type and Attitude ....................................................... 84
  Hypothesis 9: Crisis Type Impacting Involvement, Attributions, Responsibility, Accountability, Foreseeability and Intentionality (Main Effect And Interactions) ......................... 84
  Hypothesis 10: Attributions Impacting Emotions ........................................ 84
  Hypothesis 11: Involvement Impacting Emotions ........................................ 84
  Hypothesis 12: Attributions of Responsibility, Foreseeability, Intentionality and Accountability Impacting Emotion ................................................................. 85
  Hypothesis 13: Attributions Impacting Behaviour ........................................ 85
  Hypothesis 14: Emotions Impacting Behavioural Intent ............................... 85
Hypothesis 15: Attributions of Foreseeability, Intentionality and Judgments of Responsibility and Accountability Impacting Behaviour ................................................................. 85
Hypothesis 16: Attitude Impacting Behaviour ............................................................................................................. 86
Hypothesis 17: Demographic Factors Impacting Emotions, Behavioural Intentions or Attributions .......... 86
Hypothesis 18: Emotions Impacting Attitude ........................................................................................................ 87

CHAPTER 3 – PHILOSOPHY AND RESEARCH METHODS ........................................ 88

Chapter Outline ................................................................................................................................. 88
Justification for the Epistemology: The Scientific Realism Paradigm ........................................ 88
Research Design ............................................................................................................................... 89
Research Objectives ............................................................................................................................ 91

Study 1: Focus Groups ......................................................................................................................... 92
Justification of the Methodology for Study 1 .................................................................................... 93

Study 2: Pilot Study .............................................................................................................................. 93

Study 3 ............................................................................................................................................. 95
Justification of the Methodology for Study 2 and Study 3 ............................................................... 95

Ethical Matters ........................................................................................................................................ 96
Conclusion .............................................................................................................................................. 96

CHAPTER 4 – STUDY 1 ................................................................................................................. 97

Chapter Outline ........................................................................................................................................ 97
Research Questions ............................................................................................................................. 97
Research Design ...................................................................................................................................... 98

Sample .............................................................................................................................................. 98
Recruitment .......................................................................................................................................... 99

Data Collection Procedures ............................................................................................................. 100
The Setting 100
Timing 100
Staff ......................................................................................................................................................... 100
The Focus Group Procedure .................................................................................................................. 100

Qualitative Data Analysis: the Three Stages ...................................................................................... 101
1. Data Reduction ...................................................................................................................................... 101
Defining codes. ........................................................................................................................................ 102
Grouping methods. .................................................................................................................................. 102

Crises 102

2. Data Display – Findings ..................................................................................................................... 105
Findings regarding the main variables identified in the literature. ...................................................... 108
Findings on other variables from the literature. .................................................................................... 121
New variables that emerged from the analysis. .................................................................................... 123
 CHAPTER 5 – DEVELOPING THE MEASURING INSTRUMENT .................136

Chapter Outline .......................................................................................... 136
Background to Developing the Crisis Scenarios ........................................136

Scenario Development ..............................................................................137

Justification for Using a Print News Story ....................................................... 137

Operationalising Independent Variables ...................................................... 138

Operationalising Crisis Causes .................................................................. 138
Operationalising Accounts ........................................................................ 139
Pre-testing 139

Pre-test 1: crisis causes. .............................................................................. 139
Pre-test 2: Crisis causes and accounts. ....................................................... 140
Pre-test 3 – Testing the full questionnaire to identify problems with scales. ................................................................. 143

Measuring the Dependent Variables .............................................................. 143

Involvement Measures ................................................................................ 144
Measurement Tool ..................................................................................... 144
Developing the Crisis Involvement Inventory (CII) ...................................... 146

Manipulation Check for Crisis Cause ........................................................ 146

Measure for Causal Attributions ................................................................. 147

Measuring Attributions of Foreseeability and Intentionality, and Accountability ..148

Measuring Responsibility ............................................................................ 148

Measuring Emotions .................................................................................. 149
Emotion Measures ..................................................................................... 149
Scale Development for Emotions ............................................................... 150
Measuring Emotional Intensity ................................................................... 151

Measuring Behavioural Intentions .............................................................. 152
Measuring Behavioural Intent .................................................................... 152

Measuring Attitude to the Company ............................................................ 154

Measuring Factors That Were Controlled .................................................. 155
Negativity Affectivity .................................................................................. 155

Mood 156

Measuring Demographic Variables – Gender, Age, Income, Education, Culture .156
Culture 156
Controlling for Other Variables .......................................................... 157
Usage Levels ..................................................................................... 157
Company Reputation ......................................................................... 157
Credibility of Newspaper ................................................................. 158
Final Questionnaire Structure .......................................................... 158

CHAPTER 6 — STUDY 2 ........................................................................... 160

Chapter Outline .................................................................................. 160
Research Design .................................................................................. 160

The Sample 161
Graphical Examination of the Data .................................................... 161

Missing Data ....................................................................................... 161

Checking Univariate Assumptions ...................................................... 162

Questionnaire Factor Analysis – Exploratory .................................... 163

Mood Scale Items - Scale Analysis ..................................................... 166
PANAS Items - Scale Analysis ............................................................. 166
Involvement - Scale Analysis ............................................................. 166

Attributions ......................................................................................... 167

Factor analysis of attribution and attribution-like items. ................. 167
Scale reliability for attributions. ......................................................... 167
Scale reliability – responsibility. ....................................................... 167

Emotion 168

Scale reliability. .................................................................................. 168

Factor 1: Fear ...................................................................................... 168
Factor 2: Joy ....................................................................................... 168
Factor 3: Sympathy ............................................................................ 169
Factor 4: Surprise .............................................................................. 169
Factor 5: Anger .................................................................................. 169

Behaviour 169

Scale reliability. .................................................................................. 170

Factor 1: Loyalty ................................................................................ 170
Factor 2: Complaining ...................................................................... 170
Factor 3: Word-of-mouth (WOM) behaviour ..................................... 171
Pilot 3: Accounts and Manipulation Check Testing .............................................195
  (i) Responsibility-based Account Manipulation Check ................................195
  (ii) Account Manipulation Check – 1-item Measure .....................................199

Interpreting the Results ..................................................................................199

Discussion 200

Pilot 4: Testing of Injury Level, Photograph Impact and Account Manipulation Check ......200
  Testing the Scenario .....................................................................................201
  Impact of Photograph Use on Level of Harm ...............................................201
  Account Manipulation Check .......................................................................202

Discussion 205

Summary of Changes Resulting from Study 2 – Pilots 1, 2, 3, 4 .........................206
 Changes to the Independent Variables .........................................................206
  Hypothesis 19: Harm level (main effect) .....................................................207
  Hypothesis 1 extension: Impact of Accounts, Crisis type and Harm (interaction effect) on emotions, behaviours, attitude, responsibility and accountability .........................................................207
 Changes and Additions to Manipulation Checks ...........................................208
 Changes to the Dependent Variables ............................................................209
 Limitations 210
 Issues of Validity, Reliability and Rigour .....................................................210

CHAPTER 7 – STUDY 3 ......................................................................................212

Chapter Outline .............................................................................................212
Research Design ............................................................................................212
  Measuring Instrument ..................................................................................213
  Sampling 215
  Random Sampling Design ..........................................................................215
  The Mail-Out Design And Response ..........................................................217
  Respondents ...............................................................................................218

Graphical Examination Of The Data .............................................................218
  Missing Data ...............................................................................................218
  Checking Univariate Assumptions Of Normality ........................................219
  Questionnaire Factor Analysis – Exploratory and Confirmatory ..................220
    Exploratory Factor Analysis (EFA) .............................................................221
    Confirmatory Factor Analysis (CFA) ........................................................226
      Involvement .............................................................................................227
      Attributions and responsibility ...............................................................228
Emotions. ............................................................................................................................................... 229
Anger ............................................................................................................................................... 229
Fear ............................................................................................................................................... 229
Joy 230
Surprise ........................................................................................................................................... 230
Sympathy ........................................................................................................................................ 230

Behaviour. ........................................................................................................................................... 231
Loyalty ............................................................................................................................................... 231
Negative word of mouth and withdrawal of custom ................................................................. 231
Complaining ...................................................................................................................................... 231

Attitude. ............................................................................................................................................... 232
Summated data resulting from factor analyses. ................................................................. 232

Checking Multivariate Assumptions ............................................................................................... 232
Sample Size and Group Size ........................................................................................................ 232
Multivariate Normality ............................................................................................................... 232
Outliers 233
Linearity 233
Multicollinearity and Singularity ................................................................................................ 233
Homogeneity of Variance-covariance Matrices ........................................................................ 235

Data Analysis ..................................................................................................................................... 235

Test 1: Checking the Effectiveness of Crisis Scenarios ................................................................. 237
Impact of Locus and Controllability Crises on Manipulation Check ........................................... 237
Interpretation. .................................................................................................................................. 237

Test 2: The Effectiveness of Account Manipulation Checks ......................................................... 237
(i) Checking the Account against 5-item Manipulation Check .................................................. 237
Interpretation. ................................................................................................................................... 231
(ii) Checking Accounts on the 1-item Account Descriptor ....................................................... 231
Interpretation of both tests. ............................................................................................................ 232
(iii) Checking the Credibility of Accounts .................................................................................... 232
Interpretation. ................................................................................................................................... 232

Test 3: Checking Harm Against the Manipulation Check ............................................................. 233
Interpretation. ................................................................................................................................... 233

Test 4: Interaction And A Main Effect Of The IVs On Hypothesised DVs. ................................. 233
Results of MANOVA ...................................................................................................................... 233
F 235
F 235

Test 5. Impact of Account on Dependent Variables: Post-Hoc Testing ......................................... 235
Interpretation. ................................................................................................................................... 238

Test 6: Impact of Crisis Types on Hypothesised Dependent Variables ........................................ 240
Test 7: Impact of Locus and Controllability Crisis types on Dependent Variables – Post-Hoc
................................................................................................................................................................. 241
(a) Locus Crisis on DVs ............................................................................................................................... 241
(b) Impact of Controllability Crisis Type on DVs .................................................................................... 242
Discussion 243
Test 8. Impact of Harm on Dependent Variables ................................................................. 245
Test 9: Test for Variables Impacting Emotions, Behaviour And Attitude ...................... 246
Hypothesised Variables Predicting Emotions ............................................................................................ 246
(a) Hypothesised variables impacting anger. .............................................................................................. 247
(b) Hypothesized variables impacting fear. .................................................................................................. 248
(c) Hypothesized variables impacting joy. ................................................................................................. 250
(d) Hypothesized variables impacting sympathy. .................................................................................. 250
(e) Hypothesized variables impacting surprise. ..................................................................................... 251
Hypothesized Variables Impacting Behaviour .......................................................................................... 251
(a) Impact on loyalty. ................................................................................................................................. 251
(b) Impact on complaining. ......................................................................................................................... 252
(c) Impact on disloyalty (withdrawal of custom and negative word of mouth). ..................................... 253
Emotion Impacting Attitude .......................................................................................................................... 253
Discussion 254
Emotions. .................................................................................................................................................. 254
Behavioural intent. ..................................................................................................................................... 255
Attitude 258
Test 9: Impact of Demographic Variables on Emotions and Behaviour ............................. 258
Results of MANOVA. ................................................................................................................................. 259
Follow-up ANOVA for age using post-hoc testing. .................................................................................. 260
Interpretation. ............................................................................................................................................ 262
Test 10: Checking impact of Credibility and Accounts ................................................................. 263
Discussion. .................................................................................................................................................. 265
Interpretation. ............................................................................................................................................ 267
Summary of Results ................................................................................................................................. 268
Crisis Types ................................................................................................................................................ 268
Account 270
Harm ......................................................................................................................................................... 270
Predictor Variables .................................................................................................................................... 271
Demographic Variables ............................................................................................................................ 271
Issues of Validity, Reliability and Rigour ............................................................................................... 271
Limitations ................................................................................................................................................ 272
CHAPTER 8 - DISCUSSION ......................................................................................................................... 274
Chapter Outline .................................................................................................................. 274
Summary of Findings for All Tests .................................................................................. 274

Independent Variables: Crisis types, Account and Harm and Interaction Effects ........274
  Impact of Accounts on Hypothesised Dependent Variables ........................................... 275
  Impact of Crisis types on Hypothesised Dependent Variables ......................................... 277
  Harm Level on Predicted Dependent Variables .............................................................. 280
  Predicted Impact of Variables on Emotions ..................................................................... 281
  Predicted Impact of Variables on Behaviour .................................................................... 282
  Variables of Mood, Negative Affectivity, Age, Gender, Education and Income, Culture Impacting Emotions, Behaviour and Attributions. .................................................. 283
  Study 2 and demographic variables. .................................................................................. 283
  Study 3 and demographic variables. .................................................................................. 284
  Emotion Impacts Attitude ................................................................................................. 286
Summary of Results ........................................................................................................ 286

Contribution to Theory and Literature ............................................................................ 288

Accounts 289
  The First Company Crisis Study to have Investigated the Impact of the Full Range of Company Accounts in a Company Crisis on a Wide Range of Consumer Reactions .................................................. 289

Crises 291
  Explored the Wide Range of Consumer Reactions that Crises Elicit in Consumers ..........291
  Empirically Examined Wide-Ranging Consumer Reactions to a Company Crisis Scenario ................................................................. 291
  Separate effects for Crisis types of Locus and Controllability on Consumer Reactions ........ 291

Consumer Emotions ....................................................................................................... 292
  Tested a Range of Consumer Emotions in a Crisis Scenario ........................................... 292

Consumer Behaviour ..................................................................................................... 292

Attitude 293
  Crises Elicit an Array of Consumer Attitudes ................................................................. 293
  Different Emotions Predicted Attitude .......................................................................... 293
  Demonstrated that Attitude Predicted Behavioural Intentions ...................................... 293

Tested New Constructs in a Company Crisis Scenario ..................................................... 294
  Involvement ...................................................................................................................... 294
  Accountability .................................................................................................................. 294

Demographic Variables .................................................................................................. 295

Application of Affective Events Theory .......................................................................... 295

Development of Emotion Scale ........................................................................................ 295

Managerial Contributions and Implications ..................................................................... 298

Accounts 298
  Crisis Types ..................................................................................................................... 300
  Severity of Harm .......................................................................................................... 300
Appendix 6.1 Pilot 1 Consent Form and Prize Draw .............................................369

Further information .........................................................................................370

Appendix 6.2 Pilot 1 Details Covering Assumptions of Univariate Normality for Each Variable in the Questionnaire .................................................................371

6.2.1 Details on Missing Data ........................................................................371

6.2.2 Testing missing data for the mood scale. .............................................372

6.2.3 Assumptions of Normality for the Items on the Mood Scale ..................373

6.2.4 Assumptions of Normality for the Items on the PANAS Scale ..................373

6.2.5 Assumptions of Normality for the Involvement Items .............................374

6.2.6 Assumptions of Normality for the Items Dealing with Attributions of Locus, Internal Controllability and External Controllability ...........................................374

6.2.7 Assumptions of Normality for Foreseeability ....................................375

6.2.8 Assumptions of Normality for Intentionality ....................................375

6.2.9 Assumptions of Normality for Accountability ....................................376

6.2.10 Assumptions of Normality for Responsibility ....................................376

6.2.11 Assumptions of Normality for Emotion .........................................377

6.2.12 Assumptions of Normality for Behaviour ........................................378

6.2.13 Assumptions of Normality for Attitude .........................................378

Appendix 6.3 Pilot 1 Post-hoc Factor Analysis and Scale Reliability Analysis ........379

6.3.1 Factor Analysis of the Involvement Scale ........................................379

6.3.2 Post-Hoc Factor Analysis of Attribution and Attribution-Like Items ......380

6.3.3 Factor Analysis of Emotions ............................................................382

6.3.4 Factor Analysis of Behaviour with Attitude Included ..........................385

6.3.5 Factor Analysis of the Behaviour Scale ...........................................389

Appendix 6.4 Pilot 1 Multivariate Assumptions Regarding Mahalanobis Distance and Outliers ........................................................................................................391

Appendix 6.5 Pilot 1 Test 1 Box Plots and Means Plots for the Results of the Two Crisis Types: Manipulation Check ................................................................................392

Appendix 6.6 Pilot 1 Test 2: Post-hoc ANOVA for Controllability Crisis following MANOVA ........................................................................................................393

Appendix 6.7 Pilot 1 Test 2: Means Plots for Variables Showing Sig. Difference for the Locus Crisis ........................................................................................................394

Appendix 6.8 Pilot 1 Test 5: Means Plots for Variables Showing Sig. Difference for the Controllability Crisis .........................................................................................................394

Appendix 6.9 Pilot 1 Test 3: Results of MANOVA of all IVs on the Hypothesised DVs 396

Appendix 6.10 Pilot 1 Test 6: Checking Pearson Coefficients for Demographic Variables of Mood, NA and PA ..................................................................................397
Appendix 6.11 Pilot 2: Adjustment to Account Making it Responsibility-Based ..........398
Appendix 6.12 Pilot 2: Manipulation Check for Accounts ........................................399
Appendix 6.13 Pilot 2: Credibility Scale .................................................................400
Appendix 6.14 Pilot 2: New Crisis Type Story with Adjustments .........................401
Appendix 6.15 Pilot 2 Assumptions of Normality ..................................................402
Missing Data ...........................................................................................................402
Appendix 6.16 Pilot 2: Creation of a New Word-of-mouth Scale .........................403
Positive WOM .........................................................................................................403
WOM activity ...........................................................................................................405
Positive WOM .........................................................................................................405
Negative WOM .......................................................................................................405
Appendix 6.17 Pilot 2: Means Plot for Credibility of Accounts ...............................406
Appendix 6.18 Pilot 3: Adjusted Accounts for Confession ......................................407
Appendix 6.19 Pilot 3: Adjusted and New Manipulation Checks for Accounts ........409
Appendix 6.20 Pilot 3 Means Plots for Accounts ....................................................410
6.20.1 Means Plot for No Comment ...........................................................................410
6.20.2 Means Plot for Denial ....................................................................................410
6.20.3 Means Plot for Excuse ..................................................................................410
6.20.4 Means Plot for Justification .........................................................................410
6.20.5 Means Plot for Confession ..........................................................................411
Appendix 6.21 Pilot 4: Low Injury No-photograph Treatment Condition ...............412
Appendix 6.22 Pilot 4: Account Manipulation Check Expanded from Pilot 3 ..........413
Appendix 6.23 Pilot 4: Means Plots for Impact of Photograph Use on TwoHarm Levels .........................................................................................................................414
6.24.1 Means Plot for Account of No Comment ....................................................415
6.24.2 Means Plot for Account of Denial .................................................................415
6.24.3 Means Plot for Account of Excuse ...............................................................415
6.24.4 Means Plot for Account of Justification .......................................................415
6.24.5 Means Plot for Account of Confession .......................................................416
Appendix 6.25 Summary Explanation of Changes to the Questionnaire ..................417
Chapter 7 – Study 3 Appendices ..............................................................................418
Appendix 7.1 Evaluation of Attitude Scales ................................................................418
7.1.1 Evaluation of Alternate Attitude Scales .........................................................418
7.1.2 The Final Attitude Scale Used .......................................................................419
Appendix 7.2 The New Items for the Negative Word-of-Mouth Scale ......................420
Appendix 7.3 Brisbane Electoral Districts .................................................................421
Appendix 7.4 Example of Randomised Number Selection for Electorates – this for the Albert Electorate ............................................................................................................422

Appendix 7.5 Comparison of Respondents to Demographics of Brisbane Population ..423

Appendix 7.6 Univariate Assumptions For Each Variable ........................................ 425

7.6.1 Univariate Assumptions of Normality for the Involvement Items ..........................425

7.6.2 Assumptions of Normality for the Items Dealing with Attributions of Locus, Internal Controllability and External Controllability .................................................................425

7.6.3 Assumptions of Normality for Accountability .........................................................426

7.6.4 Assumptions of Normality for Responsibility ..........................................................426

7.6.5 Assumptions of Normality for Emotion ....................................................................427

7.6.6 Assumptions of Normality for Behaviour .................................................................430

7.6.7 Assumptions of Normality for Attitude ....................................................................431

Appendix 7.7 Factor Analysis – Exploratory ..................................................................432

7.7.1 EFA – 12 Factor Solution - Pattern Matrix ...............................................................432

7.7.2 EFA of Withdrawal of Custom and Word of Mouth Items ......................................434

Appendix 7.8. CFA of Items and Scale Reliabilities .......................................................435

7.8.1. Involvement Construct Tested on Half-Sample .....................................................435

7.8.2. Factor Score Weights for Involvement – Whole Sample .......................................435

7.8.3 CFA of all Attribution Items (Except Accountability) ..............................................436

7.8.4 Testing Discriminant Validity of 2-Factor Scale: Internal Controllability and Responsibility ........437

7.8.5 Testing Discriminant Validity of 1-Factor Scale – Internal Controllability and Responsibility Combined ...............................................................438

7.8.6 Factor Score Weights for Locus Scale (Internal/External) Using Entire Sample ..........439

7.8.7 Factor Score Weights for Internally Controllable Scale Using Whole Sample .............439

7.8.8 Factor Scores for Externally Controllable Scale Using Whole Sample ....................439

7.8.9 Factor Score Weights for Responsibility Using The Whole Sample .........................439

7.8.10 CFA of Anger Scale - Test on Half-Sample ............................................................441

7.8.11 CFA of Anger Scale Minus Contempt and Dislike – with Good Chi-Square .............442

7.8.12 Factor Scores for Anger Using the Entire Sample ..................................................442

7.8.13 Fear Scale with All Items and Good Chi Square Using Correlations .......................443

7.8.14 Fear Scale with Good Chi Square after Removal of Correlated Items ......................445

7.8.15 Factor Scores for Fear Using the Entire Sample ....................................................445

7.8.16 Joy Scale with Four Items and Good Chi Square ..................................................446

7.8.17 Factor Scores for Joy Using the Entire Sample .....................................................446

7.8.18 Surprise Scale with Good Chi-Square ....................................................................447

7.8.19 Factor Scores for Surprise Using the Entire Sample ..............................................447

7.8.20 Sympathy Scale with Acceptable Chi-Square .......................................................448

7.8.21 Factor Scores for Sympathy Using the Entire Sample ............................................448

7.8.22 Loyalty Scale with Acceptable Fit Indices ...............................................................449

7.8.23 Factor Scores for Loyalty Using the Entire Sample ................................................449
7.8.24 Correlation between WOM And WOC ............................................................................................................450
7.8.25 WOC-WOM Scale with Good Fit Indices ........................................................................................................451
7.8.26 Disloyalty Scale with Excellent Fit Indices ........................................................................................................452
7.8.27 Factor score weights for disloyalty scale using the entire sample .................................................................452
7.8.28 CFA of Complain Scale ..................................................................................................................................453
7.8.29 Factor Scores for Complain Using the Entire Sample .........................................................................................453
7.8.30 CFA of Attitude Scale Using the Whole Sample .................................................................................................454
7.8.31 CFA of the 4-item Attitude Scale .....................................................................................................................455
7.8.32 Factor Scores for Attitude Using the Entire Sample ............................................................................................455
Appendix 7.9 Crisis Type and Manipulation Check .................................................................................................456
7.9.1 Results for Testing Impact of Crisis Type on 2-Item Manipulation Check ............................................................456
7.9.2 Box Plots for the Manipulation Check for Locus Crisis Type and Controllable Crisis Type .........................457
Appendix 7.10 Means Plots for the Manipulation Check for Accounts .................................................................458
7.10.1 Results and Means Plot for the Manipulation Check for No Comment ............................................................458
7.10.2 Results and Means Plot for the Manipulation Check for Denial ......................................................................459
7.10.3 Results and Means Plot for the Manipulation Check for Excuse ....................................................................460
7.10.4 Results and Means Plot for the Manipulation Check for Justification ..............................................................461
7.10.5 Results and Means Plot for the Manipulation Check for Confession ..............................................................462
Appendix 7.11 Further Details on the 1-item Account Manipulation Check ..........................................................462
Appendix 7.12 Means Plot Showing Credibility of Accounts .....................................................................................463
Appendix 7.13 Box Plot Showing the IV of Harm Tested against Perceived Injury Levels ..................................................464
Appendix 7.14 Means Plots Indicating Impact of Account on Dependent Variables .......................................................465
7.14.1 Means Plot Showing Impact of Account on Anger ..........................................................................................465
7.14.2 Means Plot Showing Impact of Account on Sympathy ..................................................................................465
7.14.3 Means Plot Showing Impact of Account on Disloyalty ................................................................................466
7.14.4 Means Plot Showing Impact of Account on Loyalty ......................................................................................466
7.14.5 Means Plot Showing Impact of Account on Attitude ....................................................................................467
7.14.5 Means Plot Showing Impact of Account on Responsibility ........................................................................467
Appendix 7.15 Demographic Variables ..........................................................................................................................468
7.15.1 Bar Chart for Age ..............................................................................................................................................468
7.15.2 Bar Chart for Education .................................................................................................................................468
7.15.3 Bar Chart for Income ......................................................................................................................................469
Appendix 7.16 Non-significant Results for Demographic MANOVA ........................................................................469
Appendix 7.16 Demographic Variables ..........................................................................................................................470
7.16.1 Means Plot Showing the Impact of Age on Anger ........................................................................................470
7.16.2 Means Plot Showing the Impact of Age on Fear ..........................................................................................470
7.16.3 Means Plot Showing the Impact of Age on Joy ............................................................................................471
7.16.4 Means Plot Showing the Impact of Age on Sympathy ................................................................................471
7.16.5 Means Plot Showing the Impact of Age on Loyalty .................................................................472
7.16.6 Means Plot Showing the Impact of Age on Disloyalty ...........................................................472
Appendix 17.7 Interaction effects for Account and Credibility ......................................................473
17.7.1 Account and Credibility Impact Accountability ........................................................................473
17.7.2 Account and Credibility Impact Responsibility .....................................................................473
17.7.3 Account and Credibility Impact Anger ..................................................................................474
17.7.4 Account and Credibility Impact Joy .......................................................................................474
17.7.6 Account and Credibility Impact Disloyalty .........................................................................475
17.7.7 Account and Credibility Impact Complaining ......................................................................476
REFERENCES ........................................................................................................................................477
INDEX OF FIGURES

IMPACT OF COMMUNICATED COMPANY ACCOUNTS DURING VARIOUS CRISES ON CONSUMER EMOTIONS, ATTITUDES AND BEHAVIOURAL INTENTIONS ................................................................. 1

IMPACT OF COMMUNICATED COMPANY ACCOUNTS DURING VARIOUS CRISES ON CONSUMER EMOTIONS, ATTITUDES AND BEHAVIOURAL INTENTIONS ................................................................. 2

TABLE OF CONTENTS ........................................................................................................ 6

INDEX OF TABLES ............................................................................................................... 7

INDEX OF FIGURES ........................................................................................................... 8

A TRIBUTE .......................................................................................................................... 53

PUBLICATIONS FROM THE THESIS ............................................................................. 54

1. Refereed book chapter ........................................................................................................ 54
2. Refereed journal articles .................................................................................................... 54
3. Refereed conference papers ................................................................................................ 54

Awards ........................................................................................................................................... 54

Glossary of Definitions of Main Constructs ........................................................................... 55

Accountability ....................................................................................................................... 55
Accounts ..................................................................................................................................... 55
Attitude ..................................................................................................................................... 55
Attributions ............................................................................................................................... 55
Behaviour .................................................................................................................................. 55
Causal conditions or dimensions ............................................................................................. 55
Company crises ........................................................................................................................ 56
Credibility of message and source ........................................................................................... 56
Crisis types ............................................................................................................................... 56
Emotions ..................................................................................................................................... 56
Foreseeability ............................................................................................................................ 56
Harm .......................................................................................................................................... 57
Intentionality .............................................................................................................................. 57
Involvement .............................................................................................................................. 57
Primary appraisal ....................................................................................................................... 57
Reputation .................................................................................................................................. 57
Responsibility ............................................................................................................................ 57
CHAPTER 1 – INTRODUCTION .................................................................1

Background to the Research .................................................................1

Communicated Company Message ......................................................4

Accounts .....................................................................................................4

Accounts Impact Consumer Reactions to Crises ....................................5

Use Of Affective Events Theory To Develop A Model ...............................6

Of Consumer Reactions To Corporate Crises ..........................................6

Predicting that Success of Company Account Depends on Crisis Cause: ...6

Developing a Crisis Typology .................................................................6

Other Factors Determining Crisis Outcome ............................................7

Justification for the Research .................................................................7

Research Objectives ...............................................................................8

Methodology ..........................................................................................9

Outline of the Thesis .............................................................................11

Ethical Issues and Bias .........................................................................11

Limitations ............................................................................................12

Contribution ........................................................................................13

CHAPTER 2 – LITERATURE REVIEW ..................................................15

Chapter Outline ....................................................................................15

Background to the Problem ..................................................................16

Communicated Organisational Message ..............................................19

Account Classifications .........................................................................21

Silence or “No Comment” ........................................................................21

Denial .....................................................................................................22

Excuses ...................................................................................................23

Justifications ..........................................................................................23

Confession ..............................................................................................24

Account Summary ..................................................................................25

Results of Studies Linking Company Accounts and Consumer Purchase Intentions ....25

A Consumer-Preferred Account Hierarchy ..........................................28

Product Recall Studies .........................................................................30

How do Organisational Accounts Impact Consumer Reactions? .......32

Accounts, Attitudes and Purchase Intents .............................................32

Weiner’s Attribution Theory (1986, 1995b) ..........................................34

An explanation of attribution theory. .....................................................34
Application of WAT to Studies on Company Crises and Service Failure: Establishing the Link Between
Attributions, Anger and Purchase Intentions .........................................................................................36
Ambiguous causes. .................................................................................................................................37
Summary of Company Failure Studies Using WAT ............................................................................38
Anger as a Mediator between Company Accounts and Purchase Intentions ........................................39
Jorgensen’s (1996) study. ......................................................................................................................39
Limitations of Jorgensen’s (1996) model. ............................................................................................40
Limitations of Weiner’s Attribution Theory Applied to Company Crises .............................................41
Using Affective Events Theory as the Basis for a Model of .................................................................42
Consumer Reactions to Company Crises ............................................................................................42

Objectives of this Section ...................................................................................................................42

Weiss and Cropanzano’s (1996) Affective Events Theory .................................................................43

AET and Appraisal Theories .............................................................................................................44
AET’s application of appraisal theory. .................................................................................................46
AET and primary appraisal. .................................................................................................................

Limitations of goal theory applied to a company crisis. ..................................................................47
Applying Involvement to the Model .................................................................................................47

AET and Secondary Appraisal .........................................................................................................51
Application of Weiner’s Attribution Theory (1986, 1995b) to secondary appraisal. ......................51
AET and Affective Reactions – Emotion and Mood ..........................................................................51

AET and Emotion. .............................................................................................................................52
Application to the Model. ....................................................................................................................53

Affect and Time – Emotion Episodes ...............................................................................................54

AET: Affect-driven Behaviour ..........................................................................................................54

Application of affect-driven behaviour to the model. ..................................................................55

AET and Attitude ...............................................................................................................................56
Application of attitude to the model. .................................................................................................56

AET and Affective Predispositions ....................................................................................................56
Application to the model. ....................................................................................................................56

AET and Affective Reactions – Mood ...............................................................................................57

AET and mood. .................................................................................................................................57
Application to the Model ....................................................................................................................57

Summary of Argument Regarding AET ..........................................................................................58

Causal Dimensions as Constituting a “Crisis Typology” .................................................................60

Causal Condition and Accounts ......................................................................................................61


Summary of Crisis Typology .............................................................................................................65
Moderators of Company Accounts ................................................. 65
  Credibility of Message and Source ............................................. 66
  Company Reputation .................................................................. 67
Emotion Mediators And Moderators: Integrating Other Judgments ........ 68
  Responsibility .......................................................................... 68
  Intentionality .......................................................................... 68
  Foreseeability .......................................................................... 69
  Accountability .......................................................................... 70
  Applying accountability to organisational crises. ..................... 71
  Accountability theories. ........................................................... 72
  Consumer Harm and Injury ...................................................... 72
  Product Usage .......................................................................... 73
Variables Predicted to Impact Other Variables ................................. 73
  Education and Income ............................................................. 74
  Age .................................................................................... 74
  Gender ................................................................................ 74
  Culture .................................................................................. 75
  Culture affects emotions. ............................................................ 76
  Culture affects behaviour. .......................................................... 77
  Culture affects attributions. ........................................................ 77
  Culture summary. ..................................................................... 78
Summary of this Chapter .................................................................. 78
Hypotheses Arising from this Review ............................................. 81
  Hypothesis 1: Accounts and Crisis type (interaction effect) Impact on Emotions, Behaviour Attitude, Responsibility, Accountability and Attributions of Foreseeability and Intentionality. ................. 81
  Hypothesis 2: Accounts Impacting Emotions (main effect) .......................................................... 82
  Hypothesis 3: Accounts Impacting Behavioural intention (main effect) ............................................. 82
  Hypothesis 4: Accounts Impacting Attitude (main effect) ............................................................... 82
  Hypothesis 5: Account and Attributions of Foreseeability and Intentionality and Judgments of Responsibility and Accountability ................................................................................. 83
  Hypothesis 6: Crisis types Impacting Emotions (a main effect) ......................................................... 83
  Hypothesis 7: Crisis types Impacting Behaviour (a main effect) ....................................................... 83
  Hypothesis 8: Crisis Type and Attitude ......................................................................................... 84
  Hypothesis 9: Crisis Type Impacting Involvement, Attributions, Responsibility, Accountability, Foreseeability and Intentionality (Main Effect And Interactions) ........................................ 84
  Hypothesis 10: Attributions Impacting Emotions ............................................................................ 84
  Hypothesis 11: Involvement Impacting Emotions ........................................................................... 84
  Hypothesis 12: Attributions of Responsibility, Foreseeability, Intentionality and Accountability Impacting Emotion ........................................................................................................... 85
  Hypothesis 13: Attributions Impacting Behaviour ............................................................................ 85
  Hypothesis 14: Emotions Impacting Behavioural Intent ................................................................. 85
Hypothesis 15: Attributions of Foreseeability, Intentionality and Judgments of Responsibility and Accountability Impacting Behaviour ......................................................85
Hypothesis 16: Attitude Impacting Behaviour ...............................................................86
Hypothesis 17: Demographic Factors Impacting Emotions, Behavioural Intentions or Attributions ........86
Hypothesis 18: Emotions Impacting Attitude .................................................................87

CHAPTER 3 – PHILOSOPHY AND RESEARCH METHODS .........................88

Chapter Outline ..............................................................................................................88
Justification for the Epistemology: The Scientific Realism Paradigm ......................88
Research Design ............................................................................................................89
Research Objectives ......................................................................................................91
Study 1: Focus Groups ..................................................................................................92
Justification of the Methodology for Study 1 ....................................................................93
Study 2- Pilot Study .......................................................................................................93
Study 3 ...........................................................................................................................95
Justification of the Methodology for Study 2 and Study 3 .............................................95
Ethical Matters ...............................................................................................................96
Conclusion ....................................................................................................................96

CHAPTER 4 – STUDY 1 .................................................................97

Chapter Outline ..............................................................................................................97
Research Questions .........................................................................................................97
Research Design ............................................................................................................98
Sample .............................................................................................................................98
Recruitment .....................................................................................................................99
Data Collection Procedures ........................................................................................100
The Setting ..................................100
Timing ..................................................100
Staff .................................................................................................................................100
The Focus Group Procedure ........................................................................................100
Qualitative Data Analysis: the Three Stages ...............................................................101
1. Data Reduction ........................................................................................................101
   Defining codes. .........................................................................................................102
   Grouping methods. .................................................................................................102
   Crises ..................................................102
2. Data Display – Findings ........................................................................................105
   Findings regarding the main variables identified in the literature. .........................108
   Findings on other variables from the literature. ......................................................121
   New variables that emerged from the analysis. ......................................................123
Chapter 5 – Developing the Measuring Instrument

Background to Developing the Crisis Scenarios

Scenario Development

Justification for Using a Print News Story

Operationalising Independent Variables

Operationalising Crisis Causes

Operationalising Accounts

Pre-testing 1: crisis causes.

Pre-test 2: Crisis causes and accounts.

Pre-test 3 – Testing the full questionnaire to identify problems with scales.

Measuring the Dependent Variables

Involvement Measures

Measurement Tool

Developing the Crisis Involvement Inventory (CII)

Manipulation Check for Crisis Cause

Measure for Causal Attributions

Measuring Attributions of Foreseeability and Intentionality, and Accountability

Measuring Responsibility

Measuring Emotions

Emotion Measures

Scale Development for Emotions

Measuring Emotional Intensity

Measuring Behavioural Intentions

Measuring Behavioural Intent

Measuring Attitude to the Company

Measuring Factors That Were Controlled

Negativity Affectivity

Mood

Measuring Demographic Variables – Gender, Age, Income, Education, Culture
CHAPTER 6 — STUDY 2 ...............................................................................................................................................160

Chapter Outline .................................................................................................................................................160
Research Design ..............................................................................................................................................160

The Sample 161
Graphical Examination of the Data .....................................................................................................................161

Missing Data ..................................................................................................................................................161

Checking Univariate Assumptions .......................................................................................................................162

Questionnaire Factor Analysis – Exploratory .....................................................................................................163
Mood Scale Items - Scale Analysis ......................................................................................................................166
PANAS Items - Scale Analysis .............................................................................................................................166
Involvement - Scale Analysis ..............................................................................................................................166

Attributions ......................................................................................................................................................167
Factor analysis of attribution and attribution-like items. .......................................................................................167
Scale reliability for attributions. ..........................................................................................................................167
Scale reliability – responsibility. .........................................................................................................................167

Emotion 168
Scale reliability. ..................................................................................................................................................168
Factor 1: Fear ..................................................................................................................................................168
Factor 2: Joy ...................................................................................................................................................168
Factor 3: Sympathy .........................................................................................................................................169
Factor 4: Surprise ............................................................................................................................................169
Factor 5: Anger ...............................................................................................................................................169

Behaviour 169
Scale reliability. ..................................................................................................................................................170
Factor 1: Loyalty ..............................................................................................................................................170
Factor 2: Complaining ...................................................................................................................................170
Factor 3: Word-of-mouth (WOM) behaviour .................................................................................................171
Factor 4: Switching, now “withdrawal of custom” ...............................171

Attitude 171

Summary Of Scale Changes Resulting From Factor Analyses .................................171

Assumptions Underlying Multivariate Testing .........................................................173

Sample size and group size ..................................................................................173

Checking multivariate normality ...........................................................................173

Testing Carried Out ..............................................................................................175

Test 1. Effectiveness of the operationalisation of Crisis types in scenarios ................175

Interpreting the results. .......................................................................................176

Test 2. Interaction Effects of the Three IVs on the DVs using MANOVA ...............177

Assumption testing. .........................................................................................177

Results. 177

F 178

Interpreting the results. ....................................................................................178

Test 3. Impact Of The Independent Variables On Hypothesized Dependent Variables Using MANOVA ..............................................................179

Test 4: Impact of Account on Hypothesized Dependent Variables ..........................179

Test 5: Impact of the Crisis types on the Hypothesized Dependent Variables ..........180

F 181

Interpreting results. .........................................................................................183

Summary. .............................................................................................................183

Test 6. Testing the Impact of the Demographic Variables on the Dependent Variables .................................................................184

MANCOVA and its assumptions. .......................................................................184

Relationship between gender, culture and the variables of emotions and behaviour. .........................................................................................185

Test 7: Other Manipulation and Realism Checks ....................................................185

Summary Of Results and Recommended Changes to the Questionnaire for the Study 3
and Further Testing ............................................................................................186

Pilot 2: Adjustment and Testing of Account .........................................................187

Assumptions of Normality .....................................................................................188

Summated Scales ..................................................................................................188

Testing Manipulation Checks ..............................................................................189

Account Manipulation Check ...............................................................................189

Credibility of Account .........................................................................................190

Manipulation Check for Crises ..........................................................................190

Testing for Impact of Independent Variables ......................................................191

Multivariate Assumptions of Normality ................................................................191

Testing the Impact of Account ...........................................................................191

Testing the Impact of Crisis types .......................................................................192

Discussion 192
(i) Crisis Type Determined Consumer Response, Not Account ........................................194

(ii) A Primacy Effect was still Occurring .......................................................................194

Pilot 3: Accounts and Manipulation Check Testing ......................................................195

(i) Responsibility-based Account Manipulation Check ...............................................195

(ii) Account Manipulation Check – 1-item Measure. ....................................................199

Interpreting the Results .........................................................................................199

Discussion 200

Pilot 4: Testing of Injury Level, Photograph Impact and Account Manipulation Check ..200

Testing the Scenario ...............................................................................................201

Impact of Photograph Use on Level of Harm .............................................................201

Account Manipulation Check ..................................................................................202

Discussion 205

Summary of Changes Resulting from Study 2 – Pilots 1, 2, 3, 4. ..............................206

Changes to the Independent Variables .....................................................................206

Hypothesis 19: Harm level (main effect) ....................................................................207

Hypothesis 1 extension: Impact of Accounts, Crisis type and Harm (interaction effect) on emotions, behaviours, attitude, responsibility and accountability .........................................................207

Changes and Additions to Manipulation Checks .......................................................208

Changes to the Dependent Variables .......................................................................209

Limitations 210

Issues of Validity, Reliability and Rigour .................................................................210

CHAPTER 7 – STUDY 3 ............................................................................................212

Chapter Outline .......................................................................................................212

Research Design ......................................................................................................212

Measuring Instrument ............................................................................................213

Sampling 215

Random Sampling Design .......................................................................................215

The Mail-Out Design And Response .........................................................................217

Respondents ............................................................................................................218

Graphical Examination Of The Data ...............................................................218

Missing Data .............................................................................................................218

Checking Univariate Assumptions Of Normality .....................................................219

Questionnaire Factor Analysis – Exploratory and Confirmatory ..............................220

Exploratory Factor Analysis (EFA) ...........................................................................221

Confirmatory Factor Analysis (CFA) .........................................................................226

Involvement ..............................................................................................................227

Attributions and responsibility. ................................................................................228
Emotions. .................................................................................................................................................. 229

Anger .................................................................................................................................................. 229
Fear ..................................................................................................................................................... 229
Joy 230
Surprise ............................................................................................................................................... 230
Sympathy ............................................................................................................................................ 230

Behaviour. ........................................................................................................................................... 231

Loyalty ................................................................................................................................................. 231
Negative word of mouth and withdrawal of custom .............................................................................. 231
Complaining ....................................................................................................................................... 231

Attitude. ................................................................................................................................................ 232

Summated data resulting from factor analyses. ................................................................................... 232

Checking Multivariate Assumptions ........................................................................................................ 232

Sample Size and Group Size .................................................................................................................. 232
Multivariate Normality ............................................................................................................................ 232
Outliers 233
Linearity 233
Multicollinearity and Singularity ............................................................................................................... 233
Homogeneity of Variance-covariance Matrices ..................................................................................... 235

Data Analysis ........................................................................................................................................ 235

Test 1: Checking the Effectiveness of Crisis Scenarios ........................................................................ 237
Impact of Locus and Controllability Crises on Manipulation Check ..................................................... 237
Interpretation. ....................................................................................................................................... 237

Test 2: The Effectiveness of Account Manipulation Checks .................................................................. 237
(i) Checking the Account against 5-item Manipulation Check ............................................................. 237
Interpretation. ....................................................................................................................................... 237
(ii) Checking Accounts on the 1-item Account Descriptor ................................................................. 237
Interpretation of both tests. ...................................................................................................................... 237
(iii) Checking the Credibility of Accounts ............................................................................................ 237
Interpretation. ....................................................................................................................................... 237

Test 3: Checking Harm Against the Manipulation Check .................................................................... 233
Interpretation. ....................................................................................................................................... 233

Test 4: Interaction And A Main Effect Of The IVs On Hypothesised DVs. ........................................ 233
Results of MANOVA ............................................................................................................................ 233
F 235
F 235

Test 5. Impact of Account on Dependent Variables: Post-Hoc Testing .............................................. 235
Interpretation. ....................................................................................................................................... 238

Test 6: Impact of Crisis Types on Hypothesised Dependent Variables ................................................. 240
Test 7: Impact of Locus and Controllability Crisis types on Dependent Variables – Post-
Hoc .................................................................

Test 8. Impact of Harm on Dependent Variables .........................................

Test 9: Test for Variables Impacting Emotions, Behaviour And Attitude ........

Hypothesised Variables Predicting Emotions ..............................................

Hypothesised Variables Impacting Behaviour ...........................................

Emotion Impacting Attitude .....................................................................

Test 9: Impact of Demographic Variables on Emotions and Behaviour ....

Test 10: Checking impact of Credibility and Accounts ............................

Summary of Results ..............................................................................

Issues of Validity, Reliability and Rigour ..............................................

Limitations .........................................................................................

CHAPTER 8 - DISCUSSION .................................................................
Appendix 6.1 Pilot 1 Consent Form and Prize Draw .......................................................... 369
Further information ........................................................................................................ 370
Appendix 6.2 Pilot 1 Details Covering Assumptions of Univariate Normality for Each
Variable in the Questionnaire ...................................................................................... 371
6.2.1 Details on Missing Data ....................................................................................... 371
6.2.2 Testing missing data for the mood scale ............................................................. 372
6.2.3 Assumptions of Normality for the Items on the Mood Scale ............................... 373
6.2.4 Assumptions of Normality for the Items on the PANAS Scale ......................... 373
6.2.5 Assumptions of Normality for the Involvement Items ....................................... 374
6.2.6 Assumptions of Normality for the Items Dealing with Attributions of Locus, Internal Controllability and External Controllability ................................................................. 374
6.2.7 Assumptions of Normality for Foreseeability ................................................... 375
6.2.8 Assumptions of Normality for Intentionality .................................................... 375
6.2.9 Assumptions of Normality for Accountability ................................................... 376
6.2.10 Assumptions of Normality for Responsibility .................................................. 376
6.2.11 Assumptions of Normality for Emotion .......................................................... 377
6.2.12 Assumptions of Normality for Behaviour ....................................................... 378
6.2.13 Assumptions of Normality for Attitude ......................................................... 378
Appendix 6.3 Pilot 1 Post-hoc Factor Analysis and Scale Reliability Analysis ............... 379
6.3.1 Factor Analysis of the Involvement Scale .......................................................... 379
6.3.2 Post-Hoc Factor Analysis of Attribution and Attribution-Like Items .............. 380
6.3.3 Factor Analysis of Emotions ............................................................................... 382
6.3.4 Factor Analysis of Behaviour with Attitude Included ..................................... 385
6.3.5 Factor Analysis of the Behaviour Scale ............................................................. 389
Appendix 6.4 Pilot 1 Multivariate Assumptions Regarding Mahalanobis Distance and Outliers .................................................................................................................. 391
Appendix 6.5 Pilot 1 Test 1 Box Plots and Means Plots for the Results of the Two Crisis Types: Manipulation Check ......................................................................................... 392
Appendix 6.6 Pilot 1 Test 2: Post-hoc ANOVA for Controllability Crisis following MANOVA ......................................................................................................................... 393
Appendix 6.7 Pilot 1 Test 2: Means Plots for Variables Showing Sig. Difference for the Locus Crisis .................................................................................................................. 394
Appendix 6.8 Pilot 1 Test 5: Means Plots for Variables Showing Sig. Difference for the Controllability Crisis ....................................................................................................... 394
Appendix 6.9 Pilot 1 Test 3: Results of MANOVA of all IVs on the Hypothesised DVs 396
397
Appendix 6.10 Pilot 1 Test 6: Checking Pearson Coefficients for Demographic Variables of Mood, NA and PA .......................................................................................... 397
Appendix 7.4 Example of Randomised Number Selection for Electorates – this for the Albert Electorate .......................................................... 422

Appendix 7.5 Comparison of Respondents to Demographics of Brisbane Population .. 423

Appendix 7.6 Univariate Assumptions For Each Variable ........................................... 425

7.6.1 Univariate Assumptions of Normality for the Involvement Items ............................. 425
7.6.2 Assumptions of Normality for the Items Dealing with Attributions of Locus, Internal Controllability and External Controllability ................................................................. 425
7.6.3 Assumptions of Normality for Accountability ...................................................... 426
7.6.4 Assumptions of Normality for Responsibility ....................................................... 426
7.6.5 Assumptions of Normality for Emotion .............................................................. 427
7.6.6 Assumptions of Normality for Behaviour .......................................................... 430
7.6.7 Assumptions of Normality for Attitude ............................................................ 431

Appendix 7.7 Factor Analysis – Exploratory ................................................................. 432

7.7.1 EFA – 12 Factor Solution - Pattern Matrix .......................................................... 432
7.7.2 EFA of Withdrawal of Custom and Word of Mouth Items ..................................... 434

Appendix 7.8. CFA of Items and Scale Reliabilities ...................................................... 435

7.8.1. Involvement Construct Tested on Half-Sample .................................................. 435
7.8.2. Factor Score Weights for Involvement – Whole Sample ..................................... 435
7.8.3 CFA of all Attribution Items (Except Accountability) .................................... 436
7.8.4 Testing Discriminant Validity of 2-Factor Scale: Internal Controllability and Responsibility Combined .................................................. 438
7.8.6 Factor Score Weights for Locus Scale (Internal/External) Using Entire Sample ........ 439
7.8.7 Factor Score Weights for Internally Controllable Scale Using Whole Sample ........... 439
7.8.8 Factor Scores for Externally Controllable Scale Using Whole Sample .................... 439
7.8.9 Factor Score Weights for Responsibility Using The Whole Sample ....................... 439
7.8.10 CFA of Anger Scale - Test on Half-Sample ....................................................... 441
7.8.11 CFA of Anger Scale Minus Contempt and Dislike – with Good Chi-Square .............. 442
7.8.12 Factor Scores for Anger Using the Entire Sample ............................................. 442
7.8.13 Fear Scale with All Items and Good Chi Square Using Correlations .................... 443
7.8.14 Fear Scale with Good Chi Square after Removal of Correlated Items ..................... 445
7.8.15 Factor Scores for Fear Using the Entire Sample ................................................ 445
7.8.16 Joy Scale with Four Items and Good Chi Square ............................................. 446
7.8.17 Factor Scores for Joy Using the Entire Sample ............................................... 446
7.8.18 Surprise Scale with Good Chi-Square ............................................................ 447
7.8.19 Factor Scores for Surprise Using the Entire Sample .......................................... 447
7.8.20 Sympathy Scale with Acceptable Chi-Square .................................................. 448
7.8.21 Factor Scores for Sympathy Using the Entire Sample ........................................ 448
7.8.22 Loyalty Scale with Acceptable Fit Indices ....................................................... 449
7.8.23 Factor Scores for Loyalty Using the Entire Sample ........................................... 449
7.8.24 Correlation between WOM And WOC ................................................................. 450
7.8.25 WOC-WOM Scale with Good Fit Indices ............................................................... 451
7.8.26 Disloyalty Scale with Excellent Fit Indices ............................................................ 452
  7.8.27 Factor score weights for disloyalty scale using the entire sample ....................... 452
7.8.28 CFA of Complain Scale ......................................................................................... 453
7.8.29 Factor Scores for Complain Using the Entire Sample ............................................ 453
7.8.30 CFA of Attitude Scale Using the Whole Sample .................................................. 454
7.8.31 CFA of the 4-item Attitude Scale ......................................................................... 455
7.8.32 Factor Scores for Attitude Using the Entire Sample .............................................. 455
Appendix 7.9 Crisis Type and Manipulation Check ......................................................... 456
  7.9.1 Results for Testing Impact of Crisis Type on 2-Item Manipulation Check ............... 456
  7.9.2 Box Plots for the Manipulation Check for Locus Crisis Type and Controllable Crisis Type .... 457
Appendix 7.10 Means Plots for the Manipulation Check for Accounts ......................... 458
  7.10.1 Results and Means Plot for the Manipulation Check for No Comment ............... 458
  7.10.2 Results and Means Plot for the Manipulation Check for Denial ....................... 459
  7.10.3 Results and Means Plot for the Manipulation Check for Excuse ...................... 460
  7.10.4 Results and Means Plot for the Manipulation Check for Justification ............... 461
  7.10.5 Results and Means Plot for the Manipulation Check for Confession ............... 462
Appendix 7.11 Further Details on the 1-item Account Manipulation Check ................. 462
Appendix 7.12 Means Plot Showing Credibility of Accounts ......................................... 463
Appendix 7.13 Box Plot Showing the IV of Harm Tested against Perceived Injury Levels ................................................................................................................................. 464
Appendix 7.14 Means Plots Indicating Impact of Account on Dependent Variables .... 465
  7.14.1 Means Plot Showing Impact of Account on Anger .............................................. 465
  7.14.2 Means Plot Showing Impact of Account on Sympathy ....................................... 465
  7.14.3 Means Plot Showing Impact of Account on Disloyalty ....................................... 466
  7.14.4 Means Plot Showing Impact of Account on Loyalty ......................................... 466
  7.14.5 Means Plot Showing Impact of Account on Attitude ........................................ 467
  7.14.5 Means Plot Showing Impact of Account on Responsibility ................................ 467
Appendix 7.15 Demographic Variables ......................................................................... 468
  7.15.1 Bar Chart for Age ............................................................................................... 468
  7.15.2 Bar Chart for Education .................................................................................... 468
  7.15.3 Bar Chart for Income ....................................................................................... 469
Appendix 7.16 Non-significant Results for Demographic MANOVA ............................. 469
Appendix 7.16 Demographic Variables ......................................................................... 470
  7.16.1 Means Plot Showing the Impact of Age on Anger .......................................... 470
  7.16.2 Means Plot Showing the Impact of Age on Fear ............................................. 470
  7.16.3 Means Plot Showing the Impact of Age on Joy .............................................. 471
  7.16.4 Means Plot Showing the Impact of Age on Sympathy ..................................... 471
A TRIBUTE

They told me that the PhD is a solo journey, but that’s not true. Many people accompany you, or support you, along different sections of the often very difficult PhD path.

I started this long road with the loving support of my late husband, David Barnes. On our meandering night walks, he would listen to me as I wrestled with the arguments in my literature review. Then he’d lend me his pen, usually leaking unnoticed in his shirt pocket, so that I could jot down his helpful comments on my hand (having forgotten to bring paper). Tragically, he very suddenly and unexpectedly died of heart failure. Thanks Dave, you were right about my “tenacity”.

My studies also started with two supervisors, Prof. Janet McColl-Kennedy and Prof. Charmine Härtel, who had the difficult task of dragging the work of a mature age student - who was a long time between study - up to academic scratch.

I finished this journey under the wise mentoring of two supervisors, Prof. Beverley Sparks and Assoc. Prof. Ian Glendon. I am very grateful that they took me on as their student. They have carefully guided me through Study 2 and Study 3 to completion.

Thanks must also go to my long-suffering friends and family – you know who you are – who have been pretty much neglected, except when required to act as guinea pigs for my “pre-pilot” testing ….or otherwise to pick their brains…and especially during times of incipient meltdown. To those I would like to say: “hey, the ‘squashy hat’ party is on me!”

Thanks and love go to my Mum for her editorial skills, and to my Dad whose long battle with liver and pancreatic cancer sadly ended after my submission to the examiners.

Finally, thanks go to my new partner, Christof, both for his unfailing support and his unpaid help as a very capable research assistant, skilled at number calling “1, 7, 1”, and a talented envelope stuffer. I promise: on our future weekends away, I won’t take any work!

This work isn’t just my achievement. Parts of that squashy hat belong to you all. Thank you.
PUBLICATIONS FROM THE THESIS

1. Refereed book chapter


2. Refereed journal articles


3. Refereed conference papers


Awards

• Awarded the joint prize for “Best Academic Paper” at the 2002 Emonet Conference.
• Awarded “Best Paper” at the 2000 Public Relations Institute of Australia (PRIA) conference.
Glossary of Definitions of Main Constructs

Accountability

To be held accountable is to be held answerable for your conduct by external audiences (Frink & Ferris, 1998; Schlenker, Weigold, & Doherty, 1990) according to laws, rules and expectations (Mitchell & Scott, 1990, in Beu & Buckley, 2001), resulting in judgments of responsibility and blameworthiness, and concomitant punishment. This construct has not been included in attribution theories and, as such, is considered to be a “judgment” rather than attribution.

Accounts

A company uses an account during a crisis to explain company behaviour, often attempting to neutralise potential negative evaluations (Scott & Lynman, 1968). Main accounts are denial, justifications, excuses, and confession, plus an account avoidance response of silence or “no comment” (Schlenker, 1980). Acceptance of different levels of responsibility underpins account strategies.

Attitude

Attitudes are general evaluations, which have affective, conative and behavioural components (Weiss & Cropanzano, 1996).

Attributions

Secondary appraisal entails assessment of the context of the crisis and those involved and is the point at which causal attributions are made. Using Weiner’s (1995, 1986) attributional theory, secondary appraisal refers to a consumer’s attribution regarding the causal dimension of along two causal continua, one of locus, anchored at either end by “internal” or “external”, and the other of controllability, anchored at either end by “controllable” or “uncontrollable”.

Behaviour

Behaviour here refers to crisis-specific actions – in the context of experimental or survey work – or reported actions taken by consumers following a crisis erupting into the public domain. It includes behaviours of word-of-mouth, loyalty, withdrawal of custom and complaining.

Causal conditions or dimensions

See crisis type
**Company crises**

Company crises are events that run the risk of escalating in intensity, falling under close media or government scrutiny, interfering with normal business operations, jeopardising the positive public image of the company and its staff and damaging the company’s bottom line (Fink, 1996). Shrivastava and Mitroff (1987) and Weick (1988) that crises are triggered by specific low probability events that have a high impact on various stakeholders, and that there is urgent pressure to deal with the crisis. They include product recalls, company collapses and bankruptcies, and product tampering.

**Credibility of message and source**

Credibility assessment refers to any attempt to ascertain truthfulness (Yuille, 1989). Message credibility refers to whether a message is perceived as truthful. Source credibility comprises two underlying dimensions: perceived expertise and trustworthiness (Dholakia & Sternthal, 1977; Weiner & Mowen, 1986).

**Crisis types**

The argument was made in the literature review for use of causal conditions, that is, the root cause of different organisational crises, as the basis for a crisis typology. Causal conditions refer to the Locus of the crisis cause, that is, whether it was internal or external to the company and its degree of Controllability, that is, whether it was controllable or uncontrollable by the company – or ambiguous (Weiner, 1986). Thus there are five potential crisis types: internal controllable, internal uncontrollable, external controllable, external uncontrollable, and ambiguous.

**Emotions**

Affective Events Theory (AET) suggested that emotion consists of specific discrete emotional states brought about by the action of cognitive appraisals and that, ultimately, an emotion is a reaction to an event (Weiss & Cropanzano, 1996) and is directed at someone or something (Frijda, 1993).

**Foreseeability**

Foreseeability refers to how foreseeable potential outcomes of an action were. People are held responsible only for effects they could have foreseen, even though these effects were not a part of the actors’ goals (Schlenker, Britt, Pennington, Murphy, & Doherty, 1994). It is considered to be an attribution (Heider, 1958 in Hewstone, 1989).
Harm

Level of harm refers to the degree of harm that has occurred in relation to a crisis. This includes number and severity of injuries or deaths of people and animals and harm to the environment.

Intentionality

Intentionality implies that an act was carried out purposively, with foresight and with knowledge of the possible consequences of the action (Weiner, Amirkhan, Folkes, & Verette, 1987) and was avoidable (Hamilton & Sanders, 1992). It is considered to be an attribution (Heider, 1958 in Hewstone, 1989).

Involvement

Involvement refers to the primary appraisal of the importance of the crisis to a consumer’s concerns, values, needs, interests, goals, and beliefs.

Primary appraisal

See involvement.

Reputation

Reputation is an overall evaluation of organisational achievements (Fombrun, 1996).

Responsibility

The judgment of responsibility refers to the degree to which the company is judged to be responsible for the crisis event and its outcome. Weiner (1995b) made the argument for the differentiation of attributions from the judgment of responsibility.

Secondary appraisal

See attributions.

Severity of crisis

See harm.
CHAPTER 1 – INTRODUCTION

“When written in Chinese, the word ‘crisis' is composed of two characters. One represents danger, and the other represents opportunity”.
Attributed to John F. Kennedy

Background to the Research

The rise of consumerism over the past three decades has meant a widespread increase in concern for consumer rights and safety (Engel, Blackwell, & Miniard, 1993). Allied with the “green movement” and increased awareness of the rights of special interest groups, organisational activities are increasingly put under the media microscope. Companies are being held accountable for their private and public actions as never before (Brinson & Benoit, 1999). As a result, when a company crisis erupts and comes under media and public scrutiny, organisations are under increasing pressure to rapidly and effectively respond to public and media concerns.

The distinction is made between company crises and disasters. Disasters refer to situations where the organisation is faced with sudden, unpredictable catastrophic changes that the organisation has no control or influence over (Faulkner, 2001). These often originate in the natural environment. Examples are Hurricane Katrina that devastated New Orleans in September 2005, the 2004 Boxing Day earthquake-caused tsunami that tragically killed more than 225,000 people in South-East Asia and devastated tourist resorts, the 2003 SARS virus outbreak, and terrorist attacks such as the October 2002 Bali bombings and that of September 11, 2001 on the World Trade Centre in New York. While corporate crises are often similarly triggered by sudden low-probability events that attract media attention, interfere with business operations and threaten the company’s long-term viability, these usually originate at organisation level and threaten the company’s reputation. The cause of corporate crises often
centre around faulty decisions, inattention to emerging problems and neglect of ethical or social responsibilities (Ginzel, Kramer, & Sutton, 1992).

Companies globally have experienced a spate of crises in recent years. These have collectively cost companies billions of dollars in lost sales, damaged reputations, eroded market share, and resulted in corporate bankruptcies, class action law suits, employee job loss, and, in some cases, even cost thousands of lives - see Table 1.

*Table 1 Some examples of recent company crises*

<table>
<thead>
<tr>
<th>Year</th>
<th>Company</th>
<th>Crisis</th>
<th>Costs/injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Merck &amp; Co. Inc., USA</td>
<td>Recall of anti-arthritis drug, Vioxx, was the largest prescription drug recall in history.</td>
<td>Increased risk of heart attack and stroke among 80 million arthritis patients (Wei Choo, 2005).</td>
</tr>
<tr>
<td>2004</td>
<td>James Hardie, Australia.</td>
<td>The James Hardie company faced mass compensation claims from those dying from asbestos-related illness and cancer.</td>
<td>In Australia, 27,000 dead; another 27,000 deaths expected by 2020 (A dynasty waits, 2004). Claims expected to reach A$1.1 billion.</td>
</tr>
<tr>
<td>2001</td>
<td>Enron, USA.</td>
<td>Company collapse puts 21,000 employees out of work. Resulted in multiple class action lawsuits.</td>
<td>US$50 billion bankruptcy, $32 billion lost in market capital, employee retirement accounts lost $1 billion, directors charged (Byrnes, McNamee, Brady, Lavelle, &amp; Palmeri, 2002).</td>
</tr>
<tr>
<td>2000</td>
<td>Mitsubishi, Japan.</td>
<td>Recall of 620,000 Mitsubishi cars and trucks in Japan.</td>
<td>Recall estimate $70 million; Stock price down 30% in following month (Stand up and fight, 2000).</td>
</tr>
<tr>
<td>2000</td>
<td>Air France, France</td>
<td>Concorde jet crashed shortly after take-off.</td>
<td>100 passengers, mostly German, nine crew members and four people on the ground were</td>
</tr>
</tbody>
</table>
killed (Concorde crash, 2000).
Communicated Company Message

Following the crisis event, effective communication strategies are essential to ensure that positive relationships with stakeholders are maintained (Fishman, 1999). Company messages may be disseminated via media releases, during media conferences and interviews, and via the internet, as stakeholders seek explanations for the crisis cause as well as responsibility for the outcome. The company message may be the only tool under organisational control at this time that can influence the crisis outcome and maintain consumer confidence. Company messages may include details about the crisis and cover safety and practical issues (e.g., how to return recalled products). The message also frequently contains an explanation or “account” of the predicament-causing event designed to minimise the severity of the predicament (Schlenker, 1980). Accounts aim to shift responsibility judgments from the transgressor to prevent reprimand and punishment (Weiner, 1995b).

Accounts

Managers may strategically select accounts that they believe are most suitable for a particular crisis situation (Garrett, Bradford, Meyers, & Becker, 1989). These are intended to minimise damage to the organisation’s image and reputation, as well as reduce stakeholder provocation or antagonism (Ginzel et al., 1992). With the media pressing for a statement, response time is at a premium and often the best account choice is not obvious. Yet there are currently few guidelines and few empirical investigations indicating the optimum company account to reduce negative consumer reactions to crisis events.

Accounts include denial, justifications, excuses and confession. While not strictly an account, in this thesis I refer to silence or “no comment” as an account. Silence is the refusal of those involved to submit themselves to inquiries by audiences who have a legitimate right to demand an inquiry (Schlenker et al., 1990). Denial is a defence of innocence, such as Ford’s denial in the mid-1970s of problems with its Pinto vehicle following consumer deaths, after Pintos burst into flames upon collision (Weinberger, Romeo, & Piracha, 1991). Excuses are attempts to minimise responsibility for the event and include “scapegoating” and “diffusion of responsibility” strategies, such as that used by Exxon Valdez following its oil tanker grounding in 1989 (Williams & Olaniran, 1994). Justifications attempt to minimise the undesirable nature of the event, although admitting that some responsibility exists (Schlenker, 1980). In a full confession, those involved admit the act, accept full responsibility, include an apology and self-castigation and offer some restitution (Schlenker, 1980). For example, the Uniting Church in Australia issued an unreserved apology to children in its institutional care who suffered abuse and neglect (Caulfield, 2004). However, while accounts have been
studied interpersonally (e.g., Holtgraves, 1989; Weiner, Graham, & Zmuidinas, 1991) and in regards to customer complaints (e.g., Conlon & Murray, 1996; Hill & Baer, 1994), few studies have investigated company accounts during crises (exceptions include Jorgensen, 1994, 1996; Griffin et al., 1991; Kaman Lee, 2004), and no identified crisis study has investigated the full account range. This indicated a substantial gap in the literature regarding use of accounts following a crisis event.

Accounts Impact Consumer Reactions to Crises

Empirical studies on product recall, company crises and product failures found that company accounts impacted consumer purchase intentions. Additionally, these studies provided some evidence for the existence of a consumer-preferred account hierarchy.

In investigating how company accounts impact consumer purchase intentions, I first examined studies on company accounts, attitudes and purchase intentions, making the argument that attitudes were unreliable predictors of purchase intentions.

Next, I examined studies on service failure and crisis situations that used Weiner’s (1986) Attribution Theory (WAT) and investigated the relationship between attributions about causes of failures and consumer behavioural intentions. These studies provided evidence that attributions about the cause of a negative event generated feelings of anger or sympathy towards companies, with these thoughts and feelings directing consumer behavioural intentions, including purchase intentions (e.g., Folkes, Koletsky, & Graham, 1987; Jorgensen, 1996). In turn, reduced purchase intentions were strongly linked to a reduction in sales and market share (Weinberger, Dillon, & Allen, 1981; Weinberger & Romeo, 1989).

The company crisis study by Jorgensen (1996) specifically investigated the link between accounts, attributions and behavioural intentions, finding that two organisational accounts – confession and denial – impacted consumer attributions, anger and purchase intentions. Additionally, anger acted as the driver of negative consumer behaviour. However, the focus in attribution theory is on attributions, rather than on emotions as the immediate antecedents of behaviour. Additionally, Weiner’s (1986, 1995b) attribution theory restricted emotions to anger and sympathy, perhaps for parsimony. Yet it made intuitive sense that corporate crises evoked a range of emotions, including fear, e.g., in the James Hardie crisis, where mining of asbestos, and its use as a housing material was linked to thousands of deaths in Australia. However, no empirical research has tested this to date. As Luce (2001) noted,
very little consumer research had investigated how distinct negative emotions differentially impacted behaviours (Luce, 2001). Additionally, although Weiner (1986) noted the importance of self-relevance of the negative event in affecting outcomes, he did not include it in his model.

Use Of Affective Events Theory To Develop A Model Of Consumer Reactions To Corporate Crises

However, one model incorporated personal relevance, attributions, emotions, behaviour and attitudes as responses following a negative event: Weiss and Cropanzano’s (1996) Affective Events Theory (AET). Further, AET predicted that events may elicit a variety of emotions, each with different behavioural consequences.

Therefore, I used AET in a model to explain the process intervening between accounts and reported intended behaviours. AET regards primary and secondary appraisal as proximal causes of emotions, which then impact attitude and behaviours. My review of AET’s primary appraisal process found that AET applies personal relevance, as does WAT. I argued that personal relevance has been inadequately operationalised, and contended instead that the more widely used construct of involvement should be applied to crises. No other identified study to date had investigated crisis involvement. In the review of AET’s secondary appraisal process, I next argued for the use of WAT’s appraisal process, as this predicted that attributions are determined by people’s judgments about the cause of the event. Applied to crises, this referred to attributions regarding whether the cause of the crisis was internal to the company or external, and controllable by the company, or uncontrollable. This was consistent with Jorgensen’s (1996) application. Congruent with AET, I contended that this appraisal process resulted in a range of emotions, which Studies 2 and 3 confirmed, with emotions in turn driving both attitude and reported intended behaviour. Also congruent with AET, I predicted that consumers’ affective predispositions of mood and negative affect may determine processing strategies and affective reactions, although Study 2 results indicated that both had no impact.

Predicting that Success of Company Account Depends on Crisis Cause: Developing a Crisis Typology

From earlier results of crisis studies, which provided evidence for a consumer-preferred hierarchy of accounts, I used Weiner’s (1995b) responsibility process to contend that the best choice of company account was dependent upon the causal conditions of the crisis. I applied a crisis typology based on crisis causal conditions of locus (internal/external) and controllability
to create a decision tree to guide managers’ best choice of company account, dependent upon the cause of the crisis. I contended that, if the communicated company account was appropriate to the crisis cause, negative consumer reactions may be reduced. However, congruent with Jorgensen (1996), crisis cause was found to be a more powerful determinant of consumer reactions than were accounts.

*Other Factors Determining Crisis Outcome*

I also contended that attributions of intentionality, foreseeability and accountability should be considered in company crisis situations, and predicted that these may impact consumer reactions. To date, no studies had been identified which investigated these variables in a company crisis situation. However, only accountability was found to predict outcomes.

As well as accounts and emotions, I predicted that a number of factors influenced consumer reactions. Congruent with empirical researchers in service failure and product recall who found that company reputation (Siomkos & Shrivastava, 1993) and product usage levels (Weinberger, 1986) affected outcome, I controlled for these factors. Additionally, as amount and degree of injuries (Mowen & Ellis, 1981) influenced consumer outcomes, this was added as an extra independent variable in Study 3. However, in Study 3, it had no impact on consumer reactions.

Finally, I controlled for demographic variables found to influence consumer reactions, specifically age, gender, culture, education and income. To date, no empirical studies had been identified that investigated the impact of these variables on consumer outcomes in a corporate crisis. However, in Study 2, culture impacted complaining behaviour, while in Study 3 age was found to play a role.

While multiple factors, outlined in Chapter 2, have been found to impact consumer reactions in service failure, product recall or negative scenario applications, it was beyond the scope of this thesis to investigate them all.

*Justification for the Research*

The focus in most crisis studies, and those for service failure and product recall, has been on factors impacting purchase intent, rather than on understanding the consumer processes that act as its antecedents, or on identifying other factors that consumers themselves
consider important in a crisis situation. While a small number of these studies (e.g., Folkes, 1984; Folkes et al., 1987; Jorgensen, 1994, 1996) provided important insight into attributions that precede purchase intent, there are also clear pointers to the importance of emotions. Although the study of emotions has attracted much research interest in many fields, investigation of consumer emotions in reactions to organisations is a new research field (Zerbe & Härtel, 2000). Richins (1997) reported that most studies of consumer affect have focused on consumers’ responses to advertising. The role of consumer emotions in company crises has largely been ignored. Apart from anger and sympathy, the emotions that corporate crises elicit in consumers has not been explored, although it makes intuitive sense that crises elicit a range of emotions. A study by Frederickson, Tugade, Waugh and Larkin (2003) on resilience following the September 11, 2001 terrorist attacks, found that people recalled experiencing 20 different emotions. Additionally, while experimental studies in service failure and case study reviews of crises indicated a multitude of possible behaviours, in a crisis scenario only the behaviours of negative purchase and investment intent (Jorgensen, 1996, 1994) had previously been examined. Although results in crisis studies have shown inconsistent results for attitude, this was included as part of my model in line with AET, and was a prominent feature of consumer reactions. Thus the focus for this research was on the impact of accounts in different crisis types on a range of consumer emotions and behaviours, and on attitude.

**Research Objectives**

Despite crises’ major negative impact on companies, in large part due to negative reactions from current or potential consumers of products or services, there is little research on consumers’ reactions to crises. No research has investigated – from a consumer’s perspective – the range of thoughts, feelings and behaviours consumers have in response to a product or service crisis. This creates a problem for firms, both in their understanding of how and why consumers react to a crisis, and in their management of the crisis to reduce negative consumer outcomes and therefore minimise negative company outcomes, such as loss of sales. Therefore, one main research objective was to examine the range of consumer emotions, attitudes and behaviours that crises elicit in consumers.

In addition, while the company’s communicated account of its role in the crisis may be the only tool under company control to influence consumer reactions to the crisis, no crisis research has examined the impact of all five commonly used accounts on consumer reactions.
Therefore, another main research objective is to examine the impact of these five accounts (no comment, denial, excuse, justification, confession) on consumers’ emotions, behaviours and attitude, as well as their impact on attributions (including foreseeableability and intentionality), involvement, and judgments of accountability and responsibility.

Although Jorgensen (1996) investigated impact of two crisis types (internal/controllable, external/uncontrollable) and two accounts (denial, confession) on consumer anger and behavioural intentions, the impact of a range of crisis types and accounts on a broad spectrum of emotions and behaviours has not been examined. This includes the differential impact of each of the crisis types of Locus and Controllability. Therefore, a main research objective was to examine the main and interaction effects of different crisis types and accounts on consumer attributions, emotions, behaviour, and attitude.

Other research objectives were to examine the role that consumer involvement, attributions (including intentionality and foreseeability), and judgments of responsibility and accountability played in a crisis, as well as the impact of mood and Negative and Positive Affectivity (NA/PA) on consumer reactions. Demographic variables (age, gender, culture, income, education) were controlled and checked for effects. In addition, a number of variables were predicted to impact other dependent variables, and these were tested.

Methodology

The thesis consists of three studies, the first qualitative and the other two quantitative, each contributing to the crisis communication and consumer response puzzle, and each contributing different degrees of internal and external validity to the project in a triangulated approach.

The first study used focus groups to identify recalled thoughts, feelings and behaviours generated in consumers following a crisis. The aim of this study was to elicit the full range of factors that consumers themselves considered important in company crises. This first study was therefore concerned primarily with uncovering the likely emotions, behaviours and attitudes that consumers experienced in regards to a company or its products and services following a crisis, in order to establish a foundation for the testing of these constructs in the experimental studies. The second main objective was to check the feasibility of the theoretical
framework by investigating whether any unexpected important variables arose that impacted crisis outcome. No major adjustments to the model resulted.

The second study, using a factorial quasi-experimental design, tested the preliminary model, pre-tested the questionnaire, including the operationalisation of the independent variables of Accounts, and Crisis types, and tested the usefulness of the constructs and the validity of the scales. Five commonly used organisational accounts – no comment, denial, justification, excuse, and confession – were tested in five different crisis causal conditions or crisis types. These combined locus factors (internal/external), controllability (controllable/uncontrollable) plus an ambiguous condition through use of created scenarios in questionnaires. Extensive pre-testing was conducted. Dependent variables were emotions, behaviour, attitude as well as involvement, responsibility and various attributions. The study used a convenience sample of students \( n = 316 \) and resulted in scale refinement, model adjustment and removal of constructs. To explain results, the existence of an additional independent variable, severity of harm, was hypothesised. Attributions of foreseeability and intentionality were not found to add to the solution, nor did the variables of mood and negative affectivity, which were dropped from further analysis. Additionally, the lack of significant differences for ambiguous Crisis type meant it was dropped from further testing.

The third study, a large scale factorial experiment using a general population sample \( n = 907 \), tested the model and the hypotheses, investigating the relationship between organisational Accounts, Crisis types, Harm levels and internal consumer processes of emotions, attitudes and behavioural intents. No interactions were found for the independent variables, but both the two Crisis types and the communicated company Accounts had a main effect. No main effect was found for Harm. Crisis types were found to have a stronger impact on consumer reactions than company Accounts did, compared with externally induced crises. Internal crises resulted in significantly higher anger, fear, surprise, disloyalty, responsibility and accountability. External crises resulted in significantly higher joy, loyalty and attitude. There were no significant effects for sympathy, or complaining. Crises considered to be controllable by the company resulted in significantly higher anger, fear, complaining, disloyalty, accountability and responsibility. Crises considered to be uncontrollable by the company resulted in significantly higher joy, loyalty and attitude. Although I had predicted more positive consumer reactions for the communicated company accounts of “confession” and “justification” and more negative consumer reactions for “no comment”, “denial”, and “excuse”, results showed that both “confession” and “no comment” resulted in lower levels of consumer anger and disloyalty and higher sympathy, loyalty and attitude than other Accounts.
In addition, fear, anger and negative attitude predicted disloyalty; anger, attributions and fear predicted complaining; fear and anger resulted in negative impacts on loyalty while joy resulted in a positive impact on loyalty. Scales, constructs and the model were further refined.

Outline of the Thesis

The thesis consists of eight chapters. In Chapter 2, I provide a review of the literature on organisational accounts, consumer crisis and failure situations, consumer behavioural intents, attitudes, involvement, Weiner’s (1986, 1995) attributional theory (WAT) and Affective Events Theory (AET). I present a model based on AET, incorporating aspects of WAT, and develop a series of hypotheses from the literature. In Chapter 3, I discuss the epistemological position taken, provide an outline of, and justify, the research design. Chapter 4 describes Study 1, a series of focus groups conducted to discover consumers’ recalled thoughts, feelings and attitudes to companies during crises. The procedures used, and the findings and limitations of this study are discussed. In Chapter 5, the methodology for Studies 2 and 3 is described. I consider the pre-testing and operationalisation of the independent categorical variables of accounts and crisis types in the form of news stories. Scales were selected and justified prior to the formulation of the data collection instrument, the questionnaire. Chapter 6 discusses results from pilot testing in Study 2, which resulted in a refinement of the measuring instruments and hypotheses. Chapter 7 discusses the results from Study 3, the large-scale experimental design imposed on survey data, and the results are considered in the light of the hypotheses. In the final chapter, Chapter 8, I summarise findings from the studies, outline the contribution of this research to theory and the literature, and discuss implications for management, and limitations of the research. I conclude this chapter by examining possible areas of future research stemming from this study.

Ethical Issues and Bias

As my employment background was in the field of public relations, the purpose of my research was based on the ethical concern that companies frequently attempt to reduce or deny responsibility for crises, as is evident in crisis media stories (e.g., Fitzpatrick & Rubon, 1995). As noted earlier, after a crisis breaks out, some companies deny responsibility, even when the company is clearly at fault, or find scapegoats (external agents) in an attempt to relocate blame. Others cite mitigating circumstances where none exist. Thus I hoped to demonstrate that, if companies, when at fault, took responsibility for the crisis by confessing their responsibility, included an apology and means of restitution, then consumer reactions to
the crisis could be more favourable to the company and be less damaging. It was believed that this ownership of responsibility is a much under-used strategy in Western societies, although this response has been more evident in some recent corporate crises.

Under the Western justice system, an offender is entitled to offer their side of the story, giving extenuating circumstances where they exist, or citing other agents who contributed to the offence. Likewise, it is believed that companies are entitled to the same options following a crisis.

Limitations

The limitations of this research are covered in Chapter 8, as well as Chapters 4, 6 and 7 after each study. Besides those of the research design, this research had other limitations. One major limitation is that the testing of a model uses a static approach, which does not reflect the more dynamic processes that occur in company crises. For example, Fitzpatrick and Rubon’s (1995) media review found that companies may use account combinations. Companies may also change their account as the crisis progresses, which occurred during the massive oil spill crisis in 1989 in Alaska involving the Exxon Valdez tanker. Exxon initially attempted to minimise responsibility for the event using excuse strategies, including “scapegoating”, but eventually employed “confession” in an advertisement 10 days after the spill (Williams & Olaniran, 1994, p. 12). This change in accounts may result in a revision of consumer attributions, which, in turn, causes a revision of emotions and behaviours. However, testing this was outside the scope of this thesis.

Although crises can occur in companies that produce different products and services, consumer reactions in studies 2 and 3 are tested in a crisis where there is harm causing death or injury. While Study 3 found that Harm did not have main effects, this may not apply to all types of harm. For example, in the Enron collapse, some people experienced considerable financial harm, while in the Exxon Valdez oil spill, there was major environmental harm. In contrast, some crises involve ethical issues. Thus consumer reactions may change depending on the type of crisis and the harm involved. In addition, major crises, or those that are extended in duration, tend to receive lengthy media attention which may also affect the degree of consumer reaction. However, inclusion of these additional variables is outside the scope of this thesis.

Due to the nature of studies 2 and 3, the company was described as one that was reputable and had never previously had a major safety incident. However, consumer reactions to a “first
“time offender” may be different to a “repeat offender.” Again, testing this was outside the scope of this thesis. Another limitation was that the operationalisation of Crisis types as created crisis news stories called for imagined responses to the crisis situation created, thus consumer reactions may not mimic those of a “real-life” breaking crisis. In addition, many consumers in Study 1 had strong negative attitudes to large corporations. This may indicate that reactions to company crises may differ depending on the size and nature of the organisation, its scope of operations, and the type of business it is in. For example, a crisis involving a small local organisation involved in charity work may engender different consumer reactions to a crisis involving a large multinational company that produces a harmful product such as cigarettes.

Additionally, there are issues of sampling. The samples in all cases involved predominantly those belonging to an individualist culture (Australia), so reactions may be limited not only culturally, but also geographically. The Study 1 focus groups used a sample self-selected primarily in response to publicity, while sampling in Study 2 was limited by the use of a student sample. More on specific sample limitations are covered in the relevant chapters. Considering these limitations, the findings from the particular crises examined may be bounded by the type of company (size, nature, scope, product), type of service (airline flight), type of crisis (service harm), type of harm (physical), sample issues, and geographical area.

Contribution

This research provides a significant contribution to the scant existing literature on company crises. This was the first test of a full range of company accounts matched against a range of crisis types. The outcomes from this research create a richer understanding of the antecedents of consumer behaviour in the face of crises. In-depth knowledge was gained of how both crisis types and company accounts influence reported consumer reactions.

This was the first investigation of the range of emotions and behaviours that corporate crises elicit in consumers, and the first study to find that in crisis situations, different emotions can act as drivers of different consumer behaviours.

This was also the first identified study to apply the constructs of involvement, accountability, and attributions of foreseeability and intentionality to company crises. As such, this research adds a significant building block to the understanding of consumer reactions to corporate crises. There are multiple findings that have practical relevance to company management, including results that add weight to the public relations call for more
ethical use of accounts by companies in crisis. Currently, the legal approach of “saying nothing, doing nothing and admitting nothing” prevails over the public relations approach of “telling it all, telling it fast and telling it truthfully” (Regester & Larkin, 2000, p.160).
CHAPTER 2 – LITERATURE REVIEW

Chapter Outline

The main research focus was on investigating the impact of communicated company accounts in different crisis types on a range of consumer emotions and behaviours, and on attitude. Therefore, in this chapter, I develop a model to explain the processes involved in how a company’s account of its role in a crisis, as well as different crisis types, determine how consumers think, feel and act towards the company affected. I first discuss the importance of the company account, that is, the company’s message that is communicated via the media about its role and responsibility in the crisis. Following an examination of account studies, I contend that five accounts (no comment, denial, excuse, justification, confession) commonly communicated by companies to explain their role in the crisis, have not been empirically examined in a crisis study for their impact on consumer behaviour. Next, I examine studies on accounts used in company service failure, product recall and crisis situations, finding that company accounts influence consumers’ behavioural intentions. I argue for the existence of a consumer-preferred account hierarchy, contending that consumers prefer accounts of “confession” and “justification” over accounts of “excuse”, “denial” and “no comment”.

I then review studies that examine the processes intervening between accounts and purchase intentions. From this, I argue that attitudes are unreliable predictors of behavioural intentions in company failure situations. Next, I review the small number of studies on company failures and crisis situations that used Weiner’s (1986, 1995b) attribution theory (WAT). Results from these studies indicated that attributions resulted in anger, which acted as the immediate precursor of behavioural intentions. Yet the theory’s main limitation is that its focus is on attributions, rather than on emotions, as the main driver of behavioural intentions in company crises.

I review Weiss and Cropanzano’s (1996) Affective Events Theory (AET) and argue that, as its focus was on negative events determining consumer attributions, emotions, attitude and behaviour, this provides the basis for a model to explain the process intervening between accounts and behavioural intentions for application to company crises. In the review of AET’s primary appraisal process, while both AET and WAT apply personal relevance, I contend that
this had been inadequately operationalised, and argue instead that the more widely used construct of involvement should be applied to crises. In the review of AET’s secondary appraisal process, I argue for the use of WAT and its appraisal process, with use of causal dimensions. I contend that the best choice of company account depends upon the causal conditions of the crisis, that is, the crisis causes, and create a decision tree to guide managerial decision-making following a crisis-precipitating event. I posit that constructs of intentionality, foreseeability and accountability should be considered in company crisis situations, as should reputation and injury levels. Finally, I investigate some factors that influence consumer reactions, namely age, gender, culture, education and income, arguing that these factors should be controlled in any manipulation.

Background to the Problem

The rise of consumerism in the western world heralded a growing wave of consumer disenchantment with business, marking the start of a long deterioration of trust in institutions. By the mid-1970s, attitudes towards business in the USA had reached an all-time low (Argenti, 2003). These negative attitudes were fuelled by the plethora of major organisational crises. These included the global boycott of Nestlé products in the 1970s following Nestlé’s aggressive marketing strategies for its baby formula in less developed nations; the 1984 Union Carbide chemical disaster in Bhopal, India; the 1989 Exxon Valdez oil spill in the pristine Alaskan environment; and the 1990s breast implant safety crisis impacting Dow Corning. More recent corporate crises include the 2000 Ford and Firestone safety crisis and the 2001 Enron and Anderson corporate scandals. Crises such as these have led to consumer demand for companies to be more accountable for their actions.

Corporate crises are becoming more frequent and devastating for companies (Shrivastava & Siomkos, 1989). It is no longer a question of whether a crisis will strike an organisation, but only a matter of when, which type, and how (Mitroff & Pearson, 1993). The fragmented cross-disciplinary nature of crisis research has contributed to a lack of theoretical integration (Shrivastava, 1993, in Pearson & Clair, 1998), resulting in a lack of clarity in terms of how crises are conceptualised and defined. Pearson and Clair’s (1998) review found that crisis definitions focused on crisis characteristics, which were dependent upon researchers’ disciplinary frame.

Crisis management researchers such as Mitroff, Pauchant and Shrivastava focused on characteristics of industrial crises. Shrivastava and Mitroff (1987) noted that these crises are
caused by the simultaneous interaction of failures inside organisations and their environments; they are associated with large scale damage to human life, the natural environment and social and political institutions; they affect multiple stakeholders and there is severe pressure from government agencies, the media and the public to deal with the crisis and mitigate its effects. Shrivastava, Mitroff, Miller and Miglani (1988) added that industrial crises are caused by human agencies and the social order, and considered these crises to be increasingly frequent events which cause severe harm to consumers, workers, the public and the environment. Crises are low-probability, high-consequence events that jeopardise the most fundamental goals of an organisation (Mitroff, Pauchant & Shrivastava, 1988).

Using these characteristics, among others, Pearson and Clair (1998) consolidated elements from management researchers (i.e., Dutton, 1986; Jackson & Dutton, 1987; Quarantelli, 1988; Shrivastava et al., 1988) to create a definition of organizational crisis from a management perspective. Pearson and Clair (1998, p.59) defined an organisational crisis as a low-probability, high impact event that threatens the viability of the organisation and is characterised by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly.

While this definition provides parameters to assist managers, researchers in public relations and communication tend to use one of the earliest crisis definitions provided by Fink (1986), as this included external stakeholders such as government and media, as well as impact on company image. Fink (1986) defined crises as events that run the risk of escalating in intensity, falling under close media or government scrutiny, interfering with normal business operations, jeopardizing the positive public image of the company and its staff, and damaging the company’s bottom line. To this definition, I would include the addendum by Shrivastava and Mitroff (1987) and Weick (1988) that crises are triggered by specific low probability events that have a high impact on various stakeholders, and that there is urgent pressure to deal with the crisis. Figures analysed from the private data bank of 90,000 crisis news stories from the Institute for Crisis Management indicated that, in 2003, the three main organisational crisis causes were white collar crime (17%), mismanagement (12%), and defects and recalls (14%) (Annual ICM Crisis Report, 2003), indicating that the majority of crises were caused by management decisions or conduct.

Crises pass through a number of discernible phases. The first is signal detection (Mitroff & Pearson, 1993) or prodromal (Fink, 1986), which includes early warning signals. The second phase is preparation and prevention, involving probing of operations and
management structures for potential “breaks” (Mitroff & Pearson, 1993). This is followed by the acute crisis phase when the hot spot erupts (Fink, 1986), for which I will use the term “crisis event”. The last phase is damage containment, recovery and learning (Mitroff & Pearson, 1993) also called the chronic crisis and crisis resolution stage (Fink, 1986).

Crises may generate substantial negative publicity and consumer ill will, costing companies millions of dollars in lost sales, eroded market share, reputation damage and reduced share prices, while potentially exposing the company to future class actions. Negative information may significantly affect not only consumers’ consumption-related beliefs and attitudes (Griffin, Babin, & Attaway, 1991), but also their purchase intentions and behaviour. In an examination of four company crises, Weinberger, Romeo, and Piracha (1991) found that negative publicity was linked to sales decreases. Sales of the Horizon/Omni car fell 29% initially following negative publicity (Weinberger et al., 1991). The toxic shock publicity surrounding Procter and Gamble’s Rely tampon resulted in an almost immediate loss of $50 million and resulted in long-term reduced sales for the entire product category (Weinberger et al., 1991). The negative publicity surrounding the recall of the Ford Pinto resulted in a market share decrease of 33% in seven months, 57% in two years and 63% over a three-year period (Weinberger et al., 1991). The 1982 Tylenol tampering at retail outlets, even though Johnson and Johnson were not responsible for seven consumers’ deaths by cyanide poisoning, resulted in more than 125,000 print media stories alone, and inflicted a loss of more than US$1.4 billion (Mitchell, 1989). The company’s market share dropped from 35% to 8% (Shrivastava et al., 1988) and there was a sales decrease of 25% following a relaunch of repackaged products (Weinberger & Romeo, 1989).

While general treatments of crisis management are varied and abundant, empirical examinations of consumer response to company crisis situations are few and very recent (Jorgensen, 1996). Since research on consumer response to company crises is a new field, there is no clear consensus as to the most important features to study (Jorgensen, 1996). Researchers investigating company crisis or negative publicity situations have investigated the amount and intensity of media attention (Weinberger & Romeo, 1989), type of media coverage (Jolly & Mowen, 1985; Weinberger et al., 1991), familiarity of company name (Mowen & Ellis, 1981), amount and degree of injuries (Mowen, 1980; Mowen & Ellis, 1981), attention from regulatory bodies (Weinberger, 1986), company reputation (Sionkos & Shrivastava, 1993), product usage levels (Weinberger, 1986), crisis type (Coombs, 1995; Mitroff & Pearson, 1993), message sources such as media versus consumer groups (Griffin et
Of all these factors, the company message may be the only tool under organisational control at the crisis outbreak that can influence the crisis outcome by influencing consumer confidence, reducing consumer outrage and minimising negative impacts. Despite this fact, surprisingly few studies have investigated message effects on consumers. Following the crisis event, company messages may be disseminated via media releases, during media conferences and interviews and via the internet as stakeholders seek explanations about the crisis cause, and responsibility for the event.

Communicated Organisational Message

Following a crisis event, organisational communication is usually handled either internally by management and/or Public Relations departments, or externally through Public Relations companies or consultants. Senior management such as Chief Executive Officers (CEOs) frequently act as spokespeople to disseminate the company’s message to stakeholders via the media in the form of media releases, statements made during media conferences and interviews. Company messages may include announcements of investigations and policy statements (Fitzpatrick & Rubon, 1995), crisis details, information about the crisis cause, and information that the company is dealing with the event in a socially responsible way. These messages also frequently contain “accounts”. Accounts are explanations of a predicament-creating event designed to minimise the severity of the predicament (Schlenker, 1980), damage to the organisation’s image and reputation, and to reduce provocation or antagonism (Ginzel et al., 1992) from the organisation’s publics.

With the media pressing for a company statement, a rapid response is imperative although the immediate cause of the crisis may not yet have been determined. Managers may not have readily available explanations to explain the predicament (Ginzel et al., 1992). Frequently, legal advisors will recommend managers say and admit nothing regarding the crisis, arguing that apologising amounts to an admission of liability (Regester & Larkin, 1997). Even when management is confident of its responsibility for a crisis, the legal complexities may foster vacillation and reluctance by management to take responsibility in its

---

1 An experimental study involving product recall by Jolly and Mowen (1985) found that when the company involved in a product recall was described as socially responsible, whether by itself or the government, consumers held more favourable feelings toward the company. This “text book” strategy is now commonly adopted by companies following a product recall.
communicated response (Sellnow, Ulmer, & Snider, 1998). This is in contrast to the public relations viewpoint of maintaining a high level of truthful communication with target publics in the crisis aftermath (Regester & Larkin, 1997).

There are currently few guidelines and surprisingly few empirical examinations investigating the optimum company account choice to reduce impact on consumer reactions and purchase behaviour. Research on organisational messages, including public relations research, has its roots in “apologia”, a form of apologetic or rhetorical discourse dating back to classical times (Downey, 1993) that focuses largely on explanations offered by management. Theorists such as Hearit (1994), Hobbs (1995) and Coombs (1995) have examined use of this rhetorical response genre by organisations during crisis situations. Apologia includes a number of strategies, including denial of linkage to the event, bolstering, (where apologists attempt to secure identification with audiences and contempt for the accusers) (Downey, 1993), explanation of reasons for actions, and justification for actions (Ware & Linkugel, 1973). Although Hearit (1994) and Hobbs (1995) argued that apologia is one of the most promising frameworks for use in crisis strategies, in contrast, empirical research in other disciplines has used accounts, responses based on impression management theory, which focuses on audience responses in interpersonal and organisational contexts.

Impression management theory provides a framework for studying organisational communication responses, particularly “accounts”. People engage in impression management strategies following public failures and embarrassing events in order to counter or repair their damaged image (Goffman, 1959; Schlenker, 1980). Managers may strategically select accounts they believe are most suitable for a particular crisis situation (Garrett et al., 1989). Weiner (1995b) suggested that accounts could be viewed as methods to reduce inferences of responsibility for the negative outcome, thereby reducing blame and punishment. Hart (1968) noted that etymologically, the core meaning of responsibility involves the notion of having “to answer” (in Hamilton & Sanders, 1992). Humans are held accountable for the violation of social norms or transgressions that break social expectations (Weiner, 1995b). Until we hear the answer, we usually do not know whether or how much to blame someone for an act of wrong doing (Hamilton & Sanders, 1992). Research on accounts following negative events spans multiple disciplines (see Table 2).
**Table 2 Examples of research on accounts**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Studies on Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Brummet (1980); Danziger (1976); Downey (1993); Kaman Lee (2004); Ware &amp; Linkugel (1973).</td>
</tr>
<tr>
<td>Sociology</td>
<td>Goffman (1971); Scott &amp; Lyman (1968); Sykes &amp; Matza (1957).</td>
</tr>
</tbody>
</table>

**Account Classifications**

The literature contains several account classifications. Some theorists (e.g., Scott & Lyman, 1968) refer to two main categories of accounts: excuses (also called explanations by some researchers) and justifications. Most impression management literature refers to four categories of accounts, with researchers like Cody and McLaughlin (1985), Schlenker (1980), and Schonbach (1980) referring to denial (sometimes called refusals), justification, excuses and “confession” (also called concession or apology). Additionally, Schlenker et al. (1990), McLaughlin, Cody, and O’Hair (1983), and Weiner, Amirkhan, Folkes, and Verette (1987) differentiated “silence”. Although silence can be considered an account-avoiding response, I have subsumed “silence” or “no comment” under accounts.

As Schlenker (1980) and Schlenker et al.’s (1990) categories are commonly used to investigate consumer reactions to organisational failure and crisis situations, I have adopted this account taxonomy. This is now explicated with exemplars of organisational use of accounts given to clarify definitions and applications.

**Silence or “No Comment”**

Silence is the refusal of those involved to submit themselves to inquiries by audiences who have a legitimate right to demand an inquiry (Schlenker et al., 1990). As such, it implies no recognition of responsibility (Weiner et al., 1987). It is often expressed as a “no comment” response to the media. Weiner et al. (1987) found that at the interpersonal level, withheld
reasons for a broken social contract generated greater anger, the transgressor was held more responsible, and there was greater perceived damage, both to the relationship and the image of the transgressor, in comparison with believed excuses and even excuses that were not believed (Weiner et al., 1987).

A poll by US public relations company Porter/Novelli found that nearly two-thirds of the 1,000 members of the public surveyed felt that a “no comment” response almost always meant that the organisation was guilty of wrong-doing (Wilcox, Ault, & Agee, 1998). Fitzpatrick and Rubon’s (1995) review of sexual harassment cases that received publicity revealed that the “no comment” response was selected in 10 of 39 instances, with denial and excuse other accounts used. An example involves USA’s style icon, Martha Stewart, sentenced to five months gaol for lying about a stock sale (Stewart begins serving jail term, 2004), who initially tried to avoid all comment regarding the charges made against her.

**Denial**

In a denial, either the supposed event didn’t occur, or the party involved had nothing to do with it, or it was caused by an external agent or circumstances, so the party involved was in no way responsible for it (Schlenker, 1980). A company may use denial in an attempt to avoid responsibility and resultant legal liability for any damages associated with the crisis (Siomkos & Malliaris, 1992). However, according to Weiner et al. (1991), denial of responsibility for a negative act increases observers’ inferences that the speaker was, in fact, responsible for the act. A series of interviews by Garrett et al. (1989) investigating accounts selected by high-ranking executives following their organisation being accused of unethical behaviour by external groups, which resulted in boycotts, indicated that denials were executives’ second most popular account choice, constituting 12.5% of responses.

Fitzpatrick and Rubon’s (1995) review of organisational sexual harassment cases receiving publicity found denial of guilt was the most popular account choice, used in 20 of 39 cases. A corporate example was that of Ford’s denial of any problems with its Pinto vehicle which, in the mid 1970s, received negative publicity following consumer deaths, after Pintos burst into flames upon collision (Weinberger et al., 1991). Denial may also be ethically used by companies falsely accused of wrongdoing. For example, denial was used by McDonald’s in 1978 following unsubstantiated claims that the company used worm meat in its hamburgers (Tybout, Calder, & Sternthal, 1981) and by the Pepsi-Cola Company during the 1993 scare involving claims of syringes in cans (Stockmeyer, 1996).
**Excuses**

Excuse making is triggered whenever individuals or organisations perceive themselves to be linked to acts or outcomes that are perceived as undesirable (Higgins & Snyder, 1990). The basic motivational process in excuses is to attempt to minimise responsibility for the predicament-creating event (Schlenker, 1980; Weiner et al., 1991). Blame is displaced by invoking alternative or external reasons for poor performance (Mehlman & Snyder, 1985; Snyder & Higgins, 1988). Excuses have two dimensions: while it is admitted that those involved did perform the act, there were either circumstances where they could not have foreseen or did not foresee the consequences; or else there were extenuating circumstances, where some of the responsibility shifts to other causes or other people that may have affected the behaviour of the principals involved, or the consequences of that behaviour (Schlenker, 1980). This includes “scapegoating” which locates the blame elsewhere (Schlenker, 1980), or “diffusion of responsibility”, in which group members share responsibility and therefore claim minimal responsibility (Mynatt & Sherman, 1975 in Schlenker, 1980). While excuses made at the interpersonal level are the most frequently studied impression management technique (Weiner et al., 1991), few empirical studies have applied excuse theory to organisations.

Garrett et al.’s (1989) study of high-ranking executives’ preferred accounts, showed that excuses were the third most popular account, constituting 10.6% of responses. Following Firestone tyres on Ford vehicles being linked to 1400 accidents in the US involving 88 deaths (Jac Nasser’s biggest test, 2000) and a further 60 deaths in Venezuela, Bridgestone and Ford jockeyed over blame, with the two companies each pointing fingers (Stand up and fight, 2000). Fitzpatrick and Rubon’s (1995) review of organisational sexual harassment cases receiving publicity found excuses used with denial in four of 39 cases.

**Justifications**

Justifications attempt to minimise or deny the undesirable nature of a predicament-creating event, although in doing so, it is tacitly or explicitly admitted by those involved that an event did occur and they had some responsibility for it (Schlenker, 1980). Justifications can involve three strategies. The first is direct minimisation of the negativity of the event - it wasn’t really all that bad (Schlenker, 1980). Intel used this stance following public criticism in 1994 that its Pentium chip failed to do sophisticated calculations (Hearit, 1999). Intel claimed the problem would occur only once every 27,000 years, in contrast with IBM’s allegations that the error would occur once every 24 days for the average user (Hearit, 1999). Customer complaints studies have indicated that this downplaying of harm may only be
effective if the audience for the excuse does not have knowledge regarding the actual negative consequences (Hill & Baer, 1994). The second strategy is justification through comparison, where others do the same thing, but aren’t punished - a form of social comparison (Schlenker, 1980). The third strategy is justification through higher goals - that the ultimate goal achieved was admirable or acceptable (Schlenker, 1980). An example is that of consumer deaths following trials of a new anti-cancer drug, on the grounds that if it was successful, it would have saved many lives. Justifications appear to be one of the least investigated categories of corporate account, despite findings by Garrett et al. (1989) that justification is executives’ most preferred account, constituting 72.1% of responses.

Confession

In confession (called apologies by some researchers), theoretical and empirical account examinations have identified at least five confession components: self-castigation (Schlenker, 1980; Schlenker & Darby, 1981); admission of guilt or responsibility for the offence; a promise of future acceptable conduct (Braaten, Cody, & De Tienne, 1993; Schlenker, 1980; Schlenker & Darby, 1981); apology or expression of remorse; and restitution (Braaten et al., 1993; Schlenker, 1980; Schlenker & Darby, 1981; Schonbach, 1980). Confessions are used when it is extremely unlikely that a guilty verdict can be avoided (Schlenker, 1980). Interpersonally, Holtgraves (1989) found that apologies containing more elements were more effective than perfunctory apologies. Garrett et al.’s (1989) study found that confession was executives’ least preferred account (constituting 4.8% of responses).

Few examinations of organisational use of confessions following crises exist despite media evidence of their increasing use by companies. Following the environmentally disastrous Exxon Valdez tanker oil spill, Exxon eventually employed the confession account in an advertisement 10 days after the spill (Williams & Olaniran, 1994). The company accepted responsibility for the consequences (although not for the accident), apologised, promised restitution to the local fishing industry, and promised to construct animal emergency care units (Williams & Olaniran, 1994). Frequently, company messages following a crisis include confession components. Remorse was part of the response used by Robert Nugent, president of Jack in the Box hamburgers in the USA, following reports in 1993 of consumer food poisoning (Seitel, 1998). Dow Corning’s eventual response to its breast implant crisis included a promise to behave more appropriately in the future (Brinson & Benoit, 1996). When 200 people in Belgium and France fell ill after drinking Coke, Coca-Cola Chairman and CEO, M. Douglas Ivester flew to Belgium, published a personal apology, set up a consumer hotline and offered to pay all medical bills (Coke’s hard lesson, 1999).
Account Summary

Communication strategies frequently used by companies during crisis situations were silence and the accounts of denial, excuse, justification and confession. Organisations may use account combinations, or, as with Exxon, change accounts following monitoring of media and public reactions. As testing all possible combinations of accounts is beyond the scope of this thesis, my examination covers the five main accounts.

Results of Studies Linking Company Accounts and Consumer Purchase Intentions

In the previous section, five accounts were identified as commonly used by companies following a crisis event. In this section, I reviewed seven studies that investigated the impact of company accounts on consumer purchase intentions following either a company crisis, product failure situations or customer complaints. Of the studies investigated here, no study investigated all five accounts, although Conlon and Murray’s (1996) study investigated four. Additionally, the accounts were not necessarily identical constructs but instead close approximations of selected accounts. For example, Conlon and Murray’s (1996) apology combined apology and acceptance of responsibility (two confession components) and so is included under confession. Additionally, Griffin et al.’s (1991) response of redress, which involved the target firm making a concerned effort to remedy any potential problems and provide informational brochures to consumers, was subsumed under confession. The argument is made that results from these studies provided evidence for the existence of consumer-preferred account hierarchy.
### Table 3 Summary of results of studies investigating company accounts

<table>
<thead>
<tr>
<th></th>
<th>Positive impact</th>
<th>Inconclusive</th>
<th>Negative impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Silence</strong></td>
<td>Resulted in lowered attitudes towards the firm, although purchase intentions results were unclear (Griffin et al., 1991).</td>
<td>“Avoid the issue” - 2nd lowest score for likelihood to do business again (Conlon &amp; Murray, 1996).</td>
<td></td>
</tr>
<tr>
<td><strong>Denial</strong></td>
<td>Moderated a lowering of consumer opinions and purchase intentions for up to two weeks afterwards (Weinberger, 1986).</td>
<td>Evoked negative attitudes but no conclusive purchase intention link (Griffin et al., 1991).</td>
<td>Had little neutralising effect on negative consumer opinions, beliefs, purchase intentions (Weinberger, Allen, &amp; Dillon, 1981).</td>
</tr>
<tr>
<td></td>
<td>Resulted in less positive emotions. May have negative impact on purchase intentions (Jorgensen, 1996).</td>
<td></td>
<td>Most negative effects on purchase intentions (Siomkos &amp; Kurzbard, 1994)</td>
</tr>
<tr>
<td><strong>Excuse</strong></td>
<td>Effective response rated 2nd highest out on six responses on likelihood to do future business (Conlon &amp; Murray, 1996).</td>
<td></td>
<td>Already lowered purchase intentions were not reversed (Tybout, Calder, &amp; Sternthal, 1981).</td>
</tr>
<tr>
<td><strong>Justification</strong></td>
<td>Future purchases less negatively affected (Siomkos &amp; Kurzbard, 1994)²</td>
<td>Resulted in greater responsibility. Did not improve attitudes to the company, but softened anger and may have softened negative purchase intentions (Jorgensen, 1996).</td>
<td></td>
</tr>
<tr>
<td><strong>Confession</strong></td>
<td>Responsibility acceptance and apology increased consumers’ likelihood to do future business. Rated 4th highest out of six preferred responses (Conlon &amp; Murray, 1996).</td>
<td>Consumer attitudes were more positive in redress situation but results regarding purchase intentions not conclusive (Griffin et al., 1991).</td>
<td></td>
</tr>
</tbody>
</table>

All referred to company crises except for:

1 Referred to response to customer complaints  
2 Referred to product failure situation
Griffin et al. (1991) investigated accounts of silence, denial and redress in a negative publicity scenario involving salmonella poisoning at a chicken franchise. The researchers found that, although there was no conclusive support for a purchase intention effect, redress had a more positive effect on attitudes. Tybout et al. (1981) investigated McDonald’s use of denial in its attempt to combat rumours of worm meat in hamburgers, finding that refuting rumours was ineffective. Siomkos and Kurzbard’s (1994) study of a recall of a faulty hairdryer and adulterated apple juice tested four messages, one denial, another, super-effort (similar to confession). Of four responses tested, denial had the most negative impact on future purchase intentions while super-effort had the least.

Conlon and Murray (1996) examined six messages used in response to customer complaints, including one account combination and four accounts: apology with justification, justification, then apology, avoiding the issue and excuses. Conlon and Murray (1996) found apology with justification scoring best, followed by justification, then apology, and lastly, avoiding the issue and excuses. Jorgensen (1996) used crisis vignettes of a fatal poisoning and an airline accident to investigate denial and confession, assumed to sit at opposing ends of the account spectrum. Jorgensen (1996) found that denial resulted in higher consumer anger and may have negatively impacted purchase intentions, while confession softened anger and possibly, negative purchase intentions.

Experimental studies by Weinberger et al. (1981) and Weinberger (1986) used an actual TV news story showing a vehicle swerving out of control, with a consumer group claiming the vehicle had severe road handling difficulties. Weinberger et al. (1981) reported that company denial of the problem had little neutralising effect on the strong negative impact on opinions, beliefs and purchase intentions. In contrast, Weinberger (1986) reported that denial of the same problem using the same story moderated negative purchase intentions and opinions, although the effect was strongest when the accompanying negative visual of the car was not used. Weinberger and Romeo (1989) showed that excuse reduced negative effects on purchase intentions.

The studies summarised in Table 3 provided evidence of a relationship between company accounts and consumer purchase intentions, indicating that certain accounts were more effective in reducing purchase intention impact. Silence produced one negative effect and one inconclusive result. Denial produced negative consumer effects in three studies and a positive effect in only one study. An excuse produced negative results in one study while justifications rated second highest on likelihood to do future business. Confession
components had a positive effect on purchase intentions in two studies and positive effects on attitudes and emotions in a further two studies.

**A Consumer-Preferred Account Hierarchy**

From the results of the small number of studies investigating corporate accounts and impact on purchase intentions, certain accounts appeared less effective than others. Silence and denial appeared to more negatively impact purchase intentions, while confession, excuses and justifications had a more positive impact. Therefore, while some accounts may have a positive impact on consumer purchase intentions, others may negatively impact these, yielding a stronger contrast in effects. For example, while silence (refusal to produce an account) and denial may aggravate consumer reactions, confession may improve them. It is therefore contended that the consumer-preferred account hierarchy, as judged by purchase intent, ranged from the lowest level with silence, then denial and excuse, with justification and confession yielding the least negative outcomes. While support for this hierarchy is limited by the paucity of studies, differing test scenarios, and slightly differing account usage, this proposed hierarchy is congruent with Weiner’s (1995b) responsibility hierarchy and McLaughlin, Cody, and O’Hair’s (1983) proposed “mitigating-aggravating” continuum of responses. Further investigation on the proposed continuum could enable practitioners to justify more frequent use of accounts that less negatively impact consumers, countering proposals by legal advisors for use of denial and silence responses.

Additionally, results from five organisational and interpersonal studies that examined a spectrum of accounts (even though these did not use identical taxonomies) indicated the existence of an audience-preferred response hierarchy. Conlon and Murray’s (1996) study (described in the previous table) investigated corporate responses to consumer letters voicing product complaints and likelihood to do business again; Hill and Baer’s (1994) study was on customer complaints; Holtgraves (1989) investigated responses given following social transgressions, and Braaten et al. (1993) investigated accounts in individual failure situations in organisations. These studies yielded both similar and contrasting findings to each other, and also to the findings listed in the preceding table. The results are summated in Table 4.²

---

² While Kaman Lee (2004) also investigated an account spectrum, her results for accounts proved mainly non-significant, and have not been incorporated into this table. However, her overall ranking of accounts from most successful to least successful were compensation, corrective action, apology, no comment, excuse and justification.
Table 4 Four studies examining a broad spectrum of accounts.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>é</strong></td>
<td>Apology and justification</td>
<td>Justifications</td>
<td>Apology</td>
<td>Confession</td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td><strong>most satisfied</strong></td>
<td><strong>Deflection of blame (scape-goating)</strong></td>
<td><strong>Excuse-appeal to external/uncontrollable factors</strong></td>
<td><strong>Regret</strong></td>
</tr>
<tr>
<td><strong>Justification</strong></td>
<td></td>
<td>Justify due to a good cause</td>
<td>Deny with logical proof</td>
<td>Regret plus excuse</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Minimisation</strong></td>
<td>Deny with logical proof</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Apology</strong></td>
<td></td>
<td><strong>Justify through harm minimisation</strong></td>
<td><strong>Excuse</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td><strong>least satisfied</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Avoid issue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Excuse</strong></td>
<td></td>
<td><strong>Denial</strong></td>
<td><strong>Regret plus justification</strong></td>
<td></td>
</tr>
<tr>
<td><strong>è</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Holtgraves’ (1989) 3-component confession (apology, self-castigation, restitution) and Braaten et al.’s (1993) 4-component apology (responsibility, apology, restitution, promise of future acceptable conduct) performed better than Conlon and Murray’s (1996) 2-component apology (responsibility, remorse), which worked best in combination with justification. Of the studies examined, justification (meaning that that not only was the event not so bad, it even resulted in a better customer outcome) fared well for Conlon and Murray (1996) and Hill and Baer (1994). Justifying by minimising harm did not fare as well for Braaten et al. (1993) (sixth out of 10) and performed similarly for Hill and Baer (1994) (third out of five). Hill and Baer’s (1994) deflection of blame or scapegoating (identified under Schlenker’s excuses) also performed well. Excuses or explanations identifying extenuating circumstances fared second worst for Hill and Baer (1994), yet second for Braaten et al. (1993). In sum, while there were some similarities in performance of some accounts (e.g., confession in general performed
well, with excuses or justifications next), there were considerable differences in audience-preferred accounts. This suggested that the effect of accounts might be contingent on some situational factors involved in each failure episode. In the next section, product recall studies will be examined for evidence of the existence of a consumer-preferred account hierarchy.

**Product Recall Studies**

A series of product recall studies (Siomkos, 1989; Siomkos & Malliaris, 1992; Siomkos & Shrivastava, 1993; Siomkos & Kurzbard, 1994) investigated four levels of company response: denial, voluntary product recall, enforced product recall and “super effort”, finding the existence of a response hierarchy. Two were equivalent to accounts: denial, and “super effort”, which was similar to confession. Super-effort was characterised by aggressive technical damage control, immediate product recall, generous all-out efforts to provide relief to victims and speedy recovery of lost business (Siomkos & Kurzbard, 1994).

Congruent with the findings from the summary of company accounts and purchase intentions, the product recall studies found that denial proved detrimental for consumer attitudes and/or purchase intentions. The “super effort” response yielded better results, although in most situations there was little substantive difference between “super effort” and a lower level, less costly response option of voluntary product recall. Siomkos and Malliaris (1992) found no benefit for “super effort” in reactions from external parties such as the press, regulatory agencies and special interest groups. Siomkos and Kurzbard (1994) found little difference in purchase intentions between “super effort” and the less costly voluntary product recall. Siomkos (1989) found super-effort unnecessary for companies with high reputations while studies by Siomkos and Malliaris (1992) and Siomkos and Shrivastava (1993) indicated little or no little difference between the super effort response and voluntary recall for high or low reputation companies, indicating that a voluntary product recall only was necessary.

Audience-preferred responses differed between the interpersonal study by Holtgraves, the workplace study by Braaten et al. (1993), and the organisational studies by Conlon and Murray (1996) and Hill and Baer (1994). Additionally, the preferred responses in the Conlon and Murray (1996) and Hill and Baer (1994) studies on product dissatisfaction differed from the studies on organisational crises (e.g., Weinberger & Romeo, 1989; Griffin et al. 1991; Jorgensen, 1996). Even further, the “best responses” in the crises involving product recall differed to those involving negative publicity alone.
Therefore it was contended, using results predominantly from company crisis studies by Jorgensen (1996), Griffin et al. (1991) and Weinberger et al. (1981) that there exists an audience-preferred company account hierarchy (see Table 5).

It was further contended that, while some accounts may positively impact consumer purchase intentions, others might have a negative impact, yielding a stronger contrast in effects. For example, while no comment (that is, refusal to produce an account), and denial may aggravate consumer reactions, confession may improve consumer response.

Table 5 Suggested consumer-preferred account hierarchy for crisis

<table>
<thead>
<tr>
<th>Company account</th>
<th>Consumer purchase intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confession</td>
<td>Highest</td>
</tr>
<tr>
<td>Justification</td>
<td>ã</td>
</tr>
<tr>
<td>Excuse</td>
<td>ã</td>
</tr>
<tr>
<td>Denial</td>
<td>ã</td>
</tr>
<tr>
<td>Silence</td>
<td>Lowest</td>
</tr>
</tbody>
</table>

Further investigation of the proposed continuum would enable practitioners to justify more frequent use of accounts that less negatively impact on consumers, countering proposals by legal advisors for use of denial and silence responses. Although Jorgensen (1996) argued that widely differing accounts of denial and confession played a secondary role in influencing consumer reactions, with information about the crisis cause playing the major role, the importance of further testing accounts is argued. First, as noted earlier, the company account is the only tool under company control immediately following the crisis event that may moderate negative consumer reactions. Also, as noted in crisis situations, incorrect selection of account may generate negative consumer reactions, such as reduced purchase intentions, and subsequent income loss, as experienced by Exxon following the Exxon Valdez oil spill. Second, the full range of five accounts had not been empirically tested in a crisis situation. This is despite Garret et al.’s (1989) finding that justification was executives’ most preferred account in a negative publicity situation. In addition, although Fitzpatrick and Rubon (1995) found “no comment” and excuses, the second and third most popular accounts after denial, no hierarchy of the five accounts had been tested in a crisis. Third, further investigation of accounts may enable public relations practitioners to justify more frequent and more ethical use of appropriate accounts, countering the commonly recommended “legal response” of denial or no comment.
How do Organisational Accounts Impact Consumer Reactions?

While it was clear that organisational accounts influenced purchase intentions, the process by which they do so has not yet been discussed. As a result, in this section I examine studies by Jorgensen (1996), Griffin et al. (1991) and those by Weinberger et al. (1981) and Weinberger (1986) on company crisis, which investigated the relationship between company accounts, attitudes and purchase intentions. From these studies, it is argued that attitudes did not satisfactorily predict purchase intentions in a company crisis following delivery of an account. Purchase intentions, rather than any other reactions, were selected due to the paucity of studies investigating a spectrum of consumer reactions to failures and crisis.

Accounts, Attitudes and Purchase Intents

Early work on attitudes assumed that attitudes were causally related to behaviour. Commonsense also suggested a relationship (Robbins, Waters-Marsh, Cacioppe, & Millet, 1994). However, in the 1960s this assumed relationship was challenged by Wicker’s (1969) review of attitude research literature, which concluded that attitudes were unrelated to behaviour, or at best, only slightly related (Robbins et al., 1994). However, Ajzen and Fishbein (1980) identified the cognitive factors underlying a consumer’s intention to perform a specific behaviour, taking the view that attitudes were mediated by beliefs. Ajzen and Fishbein’s (1980) theory of reasoned action (TRA) claimed that behavioural intentions resulted from an individual combining their attitude towards a behaviour with their perception of the norms associated with that behaviour. Thus it was beliefs and feelings towards beliefs that created attitude, which was followed by purchase intention. Later work on attitudes (e.g., Breckler & Wiggins, 1989; Weiss & Cropanzano, 1996) suggested that the belief and affect component of attitudes could have different effects on attitude.

Several studies examined the impact of accounts on attitudes and purchase intent. Weinberger (1986) reported on two studies conducted by Weinberger, Allen, and Dillon (1981, 1984) using actual network TV news broadcasts in which a consumer group showed a vehicle swerving out of control due to severe road handling difficulties. One treatment contained negative footage, another the footage plus the company’s denial of the problem. Both the 1981 and 1984 studies found denial slightly improved opinions, beliefs and purchase intents, both in immediate and delayed effects.

An experimental study by Griffin et al. (1991) on negative publicity featured a fried chicken franchise involved in salmonella poisoning. Using a number of attitude measures, the results indicated that changes in attitudes were not significantly correlated with changes in
purchase intentions. While attitude varied according to the account level (with less positive reactions for no response and denial and more positive for redress), the effect was not supported for purchase intentions (Griffin et al., 1991).

Jorgensen’s (1996) experimental study using crisis scenarios (airline crash and illnesses and deaths from an over-the-counter drug) found a similar effect. While company accounts acted through emotions to affect attitudes as well as purchase intentions, there was no significant pathway between attitude and purchase or investment intentions. Like Griffin et al.’s (1991) study, this indicated that company accounts did not influence purchase intentions via a path through attitudes. Thus, while relationships were demonstrated to exist between company accounts and consumer attitudes, and company accounts and purchase intentions, no relationship was found between accounts, attitudes and purchase intentions – see Table 6.

<table>
<thead>
<tr>
<th>Response</th>
<th>High attitude-purchase intention congruence</th>
<th>Low attitude-purchase intention congruence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silence</td>
<td>Resulted in lowered attitudes toward the firm but attitude and purchase intentions did not covary (Griffin et al., 1991).</td>
<td></td>
</tr>
<tr>
<td>Denial</td>
<td>Moderated a lowering of consumer opinions, beliefs and purchase intentions. A relationship exists between attitude and purchase intentions and they covary in a consistent way (Weinberger, 1986).</td>
<td>Evoked negative attitudes but no conclusive purchase intention link (Griffin et al., 1991).</td>
</tr>
<tr>
<td>Confess-</td>
<td>Consumer attitudes were more positive in redress situation, but results regarding purchase intentions not conclusive (Griffin et al., 1991).</td>
<td></td>
</tr>
<tr>
<td>ion</td>
<td>Attitude influenced via a path through emotions but no relationship between attitude and purchase intention (Jorgensen, 1996).</td>
<td></td>
</tr>
</tbody>
</table>

From these studies it was contended that attitudes did not reliably explain how company accounts impacted consumer behaviour intentions.
Weiner’s Attribution Theory (1986, 1995b)

While attitude did not reliably predict purchase intents in crisis situations, one theory that has successfully been applied to predicting consumer responses to product failures and company crises is Weiner’s (1986, 1995b) attribution theory (WAT). This section examines studies using WAT that investigated the relationship between accounts, attributions and behavioural intentions following either a product failure or a company crisis. Results from these studies (Folkes, 1984; Folkes et al., 1987; Jorgensen, 1994, 1996) demonstrated that attributions were reliable indicators of behavioural intents, and highlighted the importance of emotion as the immediate antecedent of behavioural intentions. Of these studies, the latter four directly examined attributions, anger and purchase intentions, demonstrating the relationship between these.

An explanation of attribution theory.

Before examination of these studies, it is timely to discuss Weiner’s attribution theory (1986, 1995). Although attributional research has a fairly long history in the social sciences, it was applied to consumer behaviour only about 20 years ago (e.g., Folkes, 1984) with Weiner (2000) noting the relative absence of attributional research in consumer psychology. The little research that exists on consumer reactions to company-related failure and crisis events was based on Weiner’s (1986) attributional theory (e.g., Folkes, 1984; Weiner, Amirkhan, Folkes, & Verette, 1987; Jorgensen, 1994, 1996; Kaman Lee, 2004) and was concerned primarily with the consequences of arriving at a given attribution. Weiner’s attributional approach stemmed from studies of achievement motivation (Davies, 1992), how individuals explained their own successes and failures, and the consequences of those explanations (Martinko, 1995). Like other attribution theories, Weiner’s theory owes much to Heider’s (1944, 1958) attributional concepts of “phenomenal causality” and the “naïve analysis of action” (Hewstone, 1989). Heider (1958) proposed a distinction between personal and situational causes of negative events. Heider’s (1958) original conception was that potential causal factors were either internal to the actor, such as effort or intention, or external to the actor, such as task-related factors (Hewstone, 1989). This opened the way for Weiner’s theoretical extension and the development of a taxonomy of causes based on three dimensions (Hewstone, 1989).

Both Weiner’s (1986) theory and Weiner’s (1995) extended model posit that, following an unexpected negative event, observers make a cognitive appraisal of the cause of the event along various causal continua. This then leads to a judgment of responsibility that, in turn, results in anger or sympathy, affecting behaviour.
Mitigating circumstances can reduce the responsibility judgment – see Figure 1.

Figure 1 Weiner's (1995b) attributional model

| Mitigating circumstances | ê | Cognitive appraisal | ê | Judgment of responsibility | ê | Affective response | ê | Social of causal attribution | ê | behaviour |

The motivation to perform various behaviours was based on where the cause is determined to fall on the causal dimension continua (Jørgensen, 1994). Causal dimensions referred to the causal structure underlying the almost endless list of possible attributions for an event (Kent & Martinko, 1995). While Weiner's work involved up to five dimensions (Davies, 1992; Kent & Martinko, 1995), locus, controllability and stability had proven to be the most powerful and more widely employed than others (Davies, 1992).

Locus referred to the location of a cause, either internal to the actor or external, that is, originating within the environment (Davies, 1992). Thus the cause of a crisis (e.g., a processed food product causing poisoning) could be internal to the company (e.g., machine error in manufacturing) or external (e.g., poor handling by retailers). Controllability referred to the extent that the cause was attributed to being under the volitional control of those involved, for example, the food product poisoning could be controllable (e.g., manufacturer not maintaining equipment or strict hygiene controls) or uncontrollable (e.g., sabotage). Stability referred to the degree of variability of the cause of the outcome over time (Kent & Martinko, 1995), that is, whether the cause was fluctuating and variable, or whether it was stable, being a permanent or immutable feature (Davies, 1992). While stability may be a feature of a product or service (e.g., occasional delayed flights are a feature of an airline service), I contend that stability is less likely to be a feature of a major crisis as the company is forced to address the specific crisis cause. For example, after Chrysler received negative publicity when it was caught tampering with odometers on new cars that had been test driven (Stevens, 1999), it would be expected that this specific problem would not recur. In addition, Jørgensen’s (1996) crisis study found that no manipulated variables – including supplied crisis cause and account – had a significant effect on the item measuring stability. Attributions about crisis cause could be therefore placed at any point on each dimensional continuum of locus and controllability.
Application of WAT to Studies on Company Crises and Service Failure: Establishing the Link Between Attributions, Anger and Purchase Intentions

Five studies (Folkes, 1984; Folkes et al., 1987; Jorgensen, 1994, 1996; Kaman Lee, 2004) on product failures and company crisis applying Weiner’s (1986) attribution theory found attributions played a central role in determining consumer response to failure. Of these studies, three (Folkes et al., 1987; Jorgensen, 1994, 1996) directly examined attributions, anger and purchase intentions, demonstrating the relationship between these constructs, while the fourth (Kaman Lee, 2004) examined attributions, sympathy and consumer reactions. While these studies were concerned primarily with the consequences of arriving at a given attribution, determining that causal attributions or the provided crisis cause impacted anger and/or sympathy, and in turn, purchase intentions, two studies (Jorgensen, 1996; Kaman Lee, 2004) established that accounts impacted emotion, with Jorgensen (1996) finding that emotions, in turn, impacted behaviour. Thus Jorgensen (1996) established the account-emotion-behaviour link.

Folkes (1984) found that attributions of firm-related causes (locus, stability and controllability) in a product failure were strongly related to anger, desire to hurt the firm and expectancies of redress. However, purchase intentions were not examined. Folkes et al. (1987) investigated relationships among attributions, affect and behavioural responses of consumers experiencing a product failure (delayed flight), at a major US metropolitan airport. Consumer attributions of controllability and stability had direct effects on purchase intentions and indirect effects mediated by anger. Specifically, the more the passengers believed the cause for the delay to be stable and controllable, the angrier they were, and the less willing they were to fly with the same airline again (Folkes et al., 1987). Moreover, controllability had a stronger impact on anger and purchase intentions than did stability, while for repurchase intentions, anger had by far the largest path coefficient (Folkes et al., 1987).

Jorgensen (1994) used vignettes of a fatal airline crash to investigate the impact of causal conditions on variables (with a manipulation check confirming that perceived causal attributions were congruent with crisis information represented). Jorgensen (1994) found that the internal and controllable disaster cause (poor aircraft maintenance) led to greater anger and blame, less sympathy and lower purchase intentions than did the external uncontrollable cause (bad weather). There was greater anger when the negative outcome was controllable. In sum, attributions of internal, controllable causes of the disaster led to greater anger and also directly led to lower reported purchase intentions. The path between anger and purchase intentions was not examined.
Jorgensen (1996) used vignettes of a fatal airline crash and a drug poisoning, examining internal/controllable and external/controllable crises, finding that internal/controllable crises (again using a manipulation check for consumer attributions) impacted anger via responsibility, with degree of controllability and perceived company responsibility practically synonymous. The more internal and controllable the crisis, the more the company was considered to be responsible, with higher responsibility associated with increased anger. A direct path was found between anger and purchase intentions.

Using vignettes of an airline crash (fatal and non-fatal conditions) incorporating a manipulation check for consumer attributions, Kaman Lee (2004) found that the internal and controllable crisis (crash cause being fire due to outdated equipment) led to higher responsibility and negative impressions of the company while the external and uncontrollable crisis (fire caused by bad weather) led to greater sympathy and higher trust in the company.

Results from these studies indicated that causal information regarding product failure and crisis events determined consumer attributions about the event that, in turn, impacted consumer emotions of anger and sympathy, and reported behavioural intentions. Anger was the immediate precursor of lowered purchase intentions and other negative behaviour. From these studies, it was therefore posited that, in a crisis, the two crisis causes of locus (internal or external) and controllability (controllable or uncontrollable) interact to produce more negative or more positive consumer outcomes, with internal/controllable crises producing more negative consumer results than do external/uncontrollable crises.

Ambiguous causes.

The studies described in the previous section provided evidence that more negative reactions resulted from the internal controllable condition. Therefore, it would be expected that a crisis with ambiguous causes, that is, falling mid-way on each causal dimension continuum, locus and controllability, would produce consumer reactions that also fell mid-way between the results. That is, the more internal and controllable the crisis, the more negative the reactions, and the more external and uncontrollable the crisis, the more positive the reactions. However, an examination of studies by Jorgensen (1994) and Weiner et al. (1991) on ambiguous causal information demonstrated that this was not the case.
The crisis study by Jorgensen (1994) and one of a series of interpersonal experiments by Weiner et al. (1991) compared the impact of ambiguous causal information (containing both internal/controllable and external/uncontrollable causes) against both internal/controllable and external/uncontrollable conditions. Jorgensen (1994) found highest anger and lowest likelihood to fly with the airline in the ambiguous condition, followed by the internal/controllable condition, than the external/controllable condition. In Weiner et al.'s (1991) experiment, the highest mean overall anger and lowest forgiveness was also found in the ambiguous situation. However, in contrast to Jorgensen (1994), Weiner et al. (1991) found the second highest anger in the external/uncontrollable situation, and the lowest anger in the internal/controllable condition where the most assigned responsibility would be expected. As attribution probes were employed to assess the reliability of the causal dimensions, it is expected that this result was not an artefact of the experiment.

While both studies found that ambiguous conditions resulted in highest anger, the differences in the results for the internal/controllable and external/uncontrollable causal conditions suggested that the situational differences of the failure situation may play a role in the results. That is, differences in outcome may be expected depending on whether the failure was at the interpersonal or organisational level.

Summary of Company Failure Studies Using WAT

All five studies (Folkes, 1984; Folkes et al., 1987; Jorgensen, 1994, 1996; Kaman Lee, 2004) found that attributions that the cause of the failure was internal to, and controllable by, the company led to anger. Anger led to a number of behavioural outcomes. In the product failure studies, anger led to a desire to hurt the firm’s business (Folkes, 1984), lowered purchase intentions (Folkes et al., 1987), and the desire to complain about the product (Folkes et al., 1987). In the company crisis scenarios, anger led to negative purchase intentions (Jorgensen, 1994, 1996) and, indirectly through punitiveness, to reduced investment and purchase intentions. The product failure studies (Folkes, 1984; Folkes et al., 1987) also found that stability - the extent to which an incident is considered likely to recur - contributed to consumer anger. Three studies (Folkes et al., 1987; Jorgensen, 1994, 1996) demonstrated that causal conditions impacted consumer anger and purchase intentions. Even further, both Folkes et al.’s (1987) and Jorgensen’s (1996) path analysis provided evidence that emotion was the immediate precursor of negative purchase intent, plus complaining intent for Folkes et al. (1987) and investment intent for Jorgensen (1996).
In sum, while it appears that both attributions or causal conditions formed reliable predictors of behavioural intentions following crises, Folkes et al. (1987) and Jorgensen (1996) demonstrated the existence of direct pathways between anger and consumer behavioural intentions, while Jorgensen’s (1994) study showed that anger and purchase intents covaried.

**Anger as a Mediator between Company Accounts and Purchase Intentions**

The studies (Folkes, 1984; Folkes et al., 1987; Jorgensen, 1994, 1996) discussed earlier indicated that attributions directly influenced both anger and behavioural intentions with Folkes et al., (1987) and Jorgensen (1996) demonstrating direct paths between anger and behavioural intentions. In this section, it is intended to establish that anger acted as a mediator between company accounts and purchase intentions through an examination of Jorgensen’s (1996) study.

**Jorgensen’s (1996) study.**

As well as examining different causal conditions, Jorgensen’s (1996) study investigated the relationship between two company accounts (denial and confession), emotions and purchase and investment intentions in a company crisis scenario. Jorgensen (1996) found the two company accounts, assumed to sit at opposing ends of the account hierarchy, impacted negative emotions (comprising measures of anger, combined with reversed-scored measures of sympathy), which, in turn, impacted purchase intentions, with which they were negatively correlated. Additionally, while the path to emotions was significant, the path to attitude was not, indicating attitudes did not impact purchase intentions. Of the two accounts tested, denial and confession, anger levels were more softened by the confession response than by the denial response. On a 7-point scale, the mean level of negative emotion in the confession condition was 4.64, and in the denial condition 5.13, indicating that confession reduced anger by a small differential. Although the company account of confessing responsibility for the incident was hypothesised as leading to higher levels of perceived responsibility, the path was not significant at the $p < 0.05$ level (but was in the expected direction). Jorgensen’s (1996) model indicated that company accounts intervened after assignment of responsibility (in contrast with Weiner’s 1995b model), and directly impacted emotion, which in turn, directly impacted purchase intentions. Thus, Jorgensen (1996) found that anger acted as a mediator between company accounts and consumer purchase intentions (see Figure 2).
Figure 2 Pathways identified in Jorgensen’s (1996) structural equation model

<table>
<thead>
<tr>
<th>Causal attribution</th>
<th>Company account</th>
<th>Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative emotion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punitiveness</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Limitations of Jorgensen’s (1996) model.

Jorgensen (1996) assumed the two accounts formed opposing ends of a company account continuum, noting that these two widely differing accounts appeared to have a small impact on anger (Jorgensen, 1996). However, from the examination of accounts earlier in this chapter, it was argued that silence, that is, the refusal to comment, may lie at the lowest end of the consumer-preferred hierarchy instead of denial. Jorgensen (1996) tested the accounts using slightly ambiguous causal information. From Jorgensen’s (1994) study and studies by Weiner et al. (1991), it was found that the more ambiguous the causal information, the stronger the anger reaction. Therefore, as Jorgensen (1996) used only slightly ambiguous causal conditions, there is the potential for situations with greater causal ambiguity to generate stronger anger reactions and, in turn, create a more pronounced impact on purchase intentions.

Although widely differing company accounts may play only a minor role in influencing consumer reactions as Jorgensen (1996) noted, these company accounts may be the only tool available to managers following a crisis to reduce negative consumer emotions and behaviour. In a major company crisis where millions of dollars are at stake in terms of lost sales, even small differences in levels of anger and other negative emotions mitigated by account choice may translate into significant reductions in lost sales for the company, both in the short and long-term.

From Jorgensen’s (1996) study, it is contended that the expected emotion effects would be more strongly marked (as would the impact on consumer reactions), in a study that investigates a broader spectrum of accounts and uses more strongly ambiguous causal information. Additionally, as Jorgensen (1996) used Weiner’s attributional theory (1986, 1995b), consumer reactions were limited to the emotions of anger and sympathy, while behaviours of purchase intent and investment intent only were investigated. Thus, it is
predicted that, potentially, there are many emotions and behaviours that could be impacted by accounts in a company crisis.

Limitations of Weiner’s Attribution Theory Applied to Company Crises

The above studies using Weiner’s (1986) attribution theory in company failures provided evidence that causal beliefs generated feelings of anger and sympathy, with these thoughts and feelings directing social behaviour towards others. However, this theory follows the same thinking-feeling-behaviour sequence as attitude. According to Weiner’s (1986) theory, attributional judgments about causal dimensions collectively generate anger and sympathy and attitudes toward the target, which in turn direct behaviours, leading to the expectation that attitudes lead to behaviour. But while anger led to a lowering of attitudes, there was no path found between attitude and purchase intentions, as Jorgensen’s (1996) model demonstrated.

Weiner (1995b) believed that this thinking-feeling-acting sequence was not invariant, but that this order applied best with actions that were more personally relevant, and with important goals for the individual. The less personally relevant and more removed from the self, the less strong this motivational sequence (Weiner, 1995b). Weiner (1995b) suggested that this may be because events unrelated to oneself arouse minimal affect, or that the motivational sequence differs as events become less personally relevant. The more a crisis relates to self-important goals, the more important this sequence may be. Despite the importance of personal relevance and the finding by Folkes et al. (1987) that the level of consumer anger increased as the importance of the product failure increased, Weiner (1986, 1995b) did not include it in his model.

Additionally, although the studies using WAT identified the importance of anger impacting behavioural intentions (with the study by Folkes et al., 1987 finding that anger had by far the largest path coefficients for behavioural intents), none of these studies operationalised emotions as a major factor in consumer reactions to negative scenarios. Following an unexpected event, Weiner’s (1986, 1995b) model limited the range of affective response to anger and sympathy, perhaps for reasons of parsimony. However, it is contended that, in a crisis, consumers may experience a range of emotions beyond anger and sympathy (for example, fear regarding overseas travel heavily impacted sales during the 2002 SARS crisis). As well, it is possible that in some types of crises, such as Australia’s Arnott’s biscuit tampering by an extortionist in 1997, positive emotions apart from sympathy may occur. Further, each of these emotions may differently impact a range of behavioural intentions.
One theory that included personal relevance, attributions and emotions in a model explaining reactions to event is Weiss and Cropanzano’s (1996) Affective Events Theory (AET). AET indicated that, following a negative event, people make primary and secondary appraisals, experience a variety of negative affective reactions such as anger, fear, or sadness and each emotion may result in quite different behavioural consequences (Weiss & Cropanzano, 1996). This model gave emotions, rather than attributions, the focal role, emphasising the role of events as proximal causes of affective reactions and then as more distal causes of behaviours and attitudes (Weiss & Cropanzano, 1996). Affective Events Theory (AET) operationalised emotions as key to predicting behavioural outcomes of affective events. As it is contended that in company-related crises, emotions such as anger and fear are key to predicting behavioural outcomes such as reduced purchase intentions and consumer loyalty, AET was applied to my model.

Using Affective Events Theory as the Basis for a Model of Consumer Reactions to Company Crises

Objectives of this Section

In this section, as Affective Events Theory is central to the development of the proposed model, it is explicated in detail. While the model follows the general thrust of Affective Events Theory in operationalising emotions as key to predicting behavioural outcomes, AET is believed to have some limitations when applied to company crisis scenarios. Where AET applied primary appraisal of personal relevance using goal theory, it is argued instead that involvement was a more relevant construct to apply to consumer situations. While following AET’s application of secondary appraisal, the argument is made for use of Weiner’s (1986, 1995b) attributional sequence. Congruent with AET, it is believed that mood and affective predispositions set the stage for emotional reactions. While agreeing with AET’s conceptualisation of emotion episodes, testing this was outside the scope of this thesis. In line with AET’s contention of attitudinally-driven versus affect-driven behaviours, the proposed model argues that in company crises, as earlier asserted, emotions drive affect-driven consumer behaviours, while attitudes drive judgment-driven behaviours.
Weiss and Cropanzano’s (1996) Affective Events Theory (AET) (see Figure 3) provides some insight into how emotions elicited by events have a direct influence on behaviours and attitude. AET focuses on the structure, causes and consequences of affective experiences at work. It views events as proximal causes of affective reactions, generating an emotional reaction or mood change, with these affective experiences having a direct influence on behaviour and attitudes through affective mediation (Weiss & Cropanzano, 1996). AET includes time as an important parameter influencing affect, as mood and emotions fluctuate over time. The patterns of these affective reactions influence feelings and behaviours. Finally, AET considers the structure of affective reactions, recognising that affect is multi-dimensional. People can experience different affective reactions to events and these different reactions have different behavioural implications (Weiss & Cropanzano, 1996), see Figure 3.

Figure 3 Affective Events Theory: Macro Structure

Although AET was specifically intended to help understand employee attitudes and behaviours, its process description should generalise across settings. It is contended that AET can be used to explain how a negative event - a company crisis - elicits a variety of discrete emotions, each of which may differently impact various consumer behaviours.
AET and Appraisal Theories

While AET is an emotion theory that places the focus on events as proximal causes of affective reactions of emotion and mood, AET also applies a cognitive appraisal theory in its formulation, regarding cognitions as important to the arousal of emotions. While my model applied AET to describe the impact on consumer emotion and behavioural intentions, the position taken on the appraisal process differs from AET's goal-oriented application. It is therefore timely to give a brief background on the theoretical position adopted.

An analysis by Berkowitz and Heimer (1989) (see Figure 4) of emotion theories attracting the most attention in social psychology noted a divide into two broad categories - theories assigning paramount role to cognitive processes in the arousal of emotions, and others which placed greater emphasis on the somatic system (that part of the peripheral nervous system which transmits sensations into the central nervous system and carries commands from the central system to the muscles involved in movement).

Figure 4 Berkowitz and Heimer’s (1989) analysis of emotion theories

The somatic approach holds that cognitive appraisals are not all-important in the formation of emotional experience. This is demonstrated by Tomkins’ (1984) example that a slap on the face is likely to arouse emotion, usually anger (in Berkowitz & Heimer, 1989).

Another somatic approach maintains that affective reactions are not always the product of cognitive appraisals, with Zajonc (1980, 1984) one of the best known exponents of this view (in Berkowitz & Heimer, 1989). Zajonc (1980, 1984) argued that affect and cognition
were separate and partially independent systems, and that affective judgments can be made without any cognitive encoding (in Berkowitz & Heimer, 1989).

In contrast, the cognitive theories have been the most popular approach in social psychology, assuming that the person’s thoughts and interpretations are virtually all-important in shaping emotional experiences (Berkowitz & Heimer, 1989). Berkowitz and Heimer (1989) argued that cognitive theories have divided into attribution-appraisal theories and labelling-attributio nal conceptions. With the labelling-attributional approach, emotional experience is determined by the label that the aroused person places on body sensations (Berkowitz & Heimer, 1989).

For attribution and appraisal theories, a cognitive assessment of the situation was always involved in emotions (Berkowitz & Heimer, 1989) suggesting that the nature of an emotional reaction is based on the individual’s subjective appraisal or evaluation of an antecedent situation or event (Scherer, 1997). These theories developed independently in the 1980s and 1990s (Scherer, 1997). Where they differ is on the elements to be appraised, although the high degree of convergence of the nature of appraisal dimensions suggested high face validity (Scherer, 1997). Elements cited included personal relevance, coping potential and causality.

Appraisal theorists (e.g., Lazarus & Smith, 1988; Smith, Haynes, Lazarus, & Pope, 1993) argued for the separation of appraisal and attributional theories on the grounds that attributional theorists did not include appraisals of significance of the facts for personal well being (Smith et al., 1993). These authors considered that attributions were to do with “cold cognitions” of an encounter, while appraisals consisted of evaluation of the significance of the facts for personal wellbeing (Smith et al., 1993). Appraisal theories, including those of Frijda (1993), Lazarus (1991), Weiner’s (1986) attribution theory and Weiss and Cropanzano’s (1996) AET, agreed that the degree of personal relevance determines the intensity of the experienced emotion. What the appraisal theorists disagreed on were the exact constituents of personal relevance. Goal relevance theorists took this even further, arguing for the separation of goal relevance theories from appraisal theories on the grounds that, while appraisal theorists included goal-conduciveness among appraisals, emotion can be elicited simply by recognition of a goal-relevant event (Oatley & Duncan, 1994; see Figure 5).
AET’s application of appraisal theory.

Congruent with most appraisal theories (e.g., Bower & Cohen, 1982; Frijda, 1993; Lazarus, 1991; Weiner, 1986), AET suggested that events elicited emotions through a two-part appraisal process, with primary appraisal of the personal relevance of the event determining emotional intensity. For AET and appraisal theories, including WAT, secondary appraisal determines the experience of discrete emotions like anger, sadness and joy. In line with AET and appraisal theories, it is contended that the primary appraisal process determines the intensity of emotion in a company crisis scenario. While some researchers refer to intensity as magnitude of emotional response or strength of affect (Larsen, Diener, & Cropanzano, 1987; Petty, Gleicher & Baker, 1991), other researchers viewed intensity as a multi-dimensional component (e.g., Averill, 1982; Gilboa & Revelle, 1994; Sonnemans & Frijda, 1994, 1995), arguing that measuring overall felt intensity may well measure only the most salient aspects of the emotion only. However, for the purpose of this thesis, emotional intensity refers to strength of emotion.

Although the construct of personal relevance had not been directly tested in a consumer crisis scenario, it had been noted that personal relevance had a direct bearing on anger intensity in a service failure situation. For example, Folkes et al.’s (1987) study involving a delayed flight found that levels of anger increased with the importance to the consumer of the product failure. However, appraisal theorists’ construct of personal relevance had not been clearly conceptualised (Celsi & Olson, 1988).

AET and primary appraisal.

Drawing from appraisal theorists like Lazarus (1991), Frijda (1993), Ortony, Clore, and Collins (1988) and goal theorists like Stein, Tribasso, and Liwag (1993), AET argued that primary appraisal was based on “concern relevance”, which was intricately tied to one’s
personal set of goals and values (Weiss & Cropanzano, 1996, p. 32). Goals consisted of broad distal goals and sub-goals and formed a goal hierarchy. Cropanzano, James, and Konovsky (1993) believed that goals and objectives can be what people strive for, what they seek to avoid, what they hope to maintain or what they want to see occur (Weiss & Cropanzano, 1996). AET argued that the intensity of emotional arousal is related to the “event-implicated goal”, its position in the goal hierarchy and its instrumental relationship with other goals (Weiss & Cropanzano, 1996). Thus primary appraisal contained an evaluation of the importance of the goal, with the intensity of the emotional response dependent upon how relevant the event was to a goal, how important the affected goal was, and how inconsistent the event was to the relevant goal (Weiss & Cropanzano, 1996).

Limitations of goal theory applied to a company crisis.

While not denying that personal goals may be affected both in work scenarios referred to by AET and in company crises, it is suggested that goals may be too narrow for the broad range of personal concerns that may influence consumer reactions following a crisis. For example, consumers’ ethical concerns may be activated following pollution issues like that involving Shell in Nigeria and Europe. Although AET referred to values, goals were its main focus in primary appraisal.

Applying Involvement to the Model

While the construct of personal relevance had not been clearly conceptualised by appraisal theorists, over the past 30 years a considerable body of evidence had supported involvement as an important concept in understanding and predicting consumer behaviour. Antil (1984) defined involvement as the level of perceived personal importance and/or interest evoked by a stimulus within a specific situation, although Zaichkowsky (1985) expanded it to include needs and values, as well as interests. Antil (1984) and Zaichkowsky (1985) conceptualised involvement as varying along a continuum from very low levels, with little or no perceived personal relevance, to high levels where the consumer had perceptions of strong personal relevance. The concept of involvement had been extensively empirically tested, with most recent work on involvement building on the efforts of Zaichkowsky (1985) and Laurent and Kapferer (1985) (in McColl-Kennedy & Fetter, 1999). While the concept of involvement was usually applied to products and brands, consumers may be involved with many issues, including events (Peter & Olson, 1990).
Extensive research on consumer involvement had identified three factors that determined consumers’ level of involvement (Engel et al., 1993). First, personal factors, which referred to consumers’ inherent values, needs or interests that attracted a consumer to an object (Zaichowsky, 1985) or were instrumental in achieving the consumer’s goals (Celsi & Olson, 1988). Second, involvement was affected by temporary feelings of self-relevance due to specific external physical and social stimuli in the environment (Zaichkowsky, 1985). This was referred to as situational self-relevance. Third, involvement was affected by how a consumer responded to the stimulus or product. Usually, this dimension was used to refer to product characteristics, with products becoming more involving if there was some perceived risk (physical, psychological, performance, social, financial) (Jacoby & Kaplan, 1972 in Craig-Lees, Joy, & Browne, 1995).

Involvement was activated as “felt involvement” when an individual’s intrinsic characteristics were confronted with appropriate stimuli (Engel et al., 1993). Celsi and Olson (1988) and Bloch and Richins (1983) conceptualised felt involvement as a motivational state that energised and directed consumers’ cognitive processes and overt behaviours (Peter & Olson, 1990). A number of researchers (Houston & Rothschild, 1978; Richins & Bloch, 1991; Zaichkowsky, 1985) considered that the level of felt involvement a consumer experiences in a given situation was determined by two sources - intrapersonal or intrinsic factors and situational determinants of self-relevance (Celsi & Olson, 1988). The sources of felt involvement included consumer characteristics, product or stimulus characteristics, and characteristics of the situation. This process is outlined in Figure 6.

Felt involvement had two main sources: intrinsic sources of personal relevance (ISPR) and situational sources of personal relevance (SSPR). Intrinsic sources of personal relevance (ISPR) were relatively stable, enduring structures of personally relevant knowledge, derived from past experience and stored in long-term memory (Celsi & Olson, 1988). This knowledge represented perceived associations between objects and/or actions and important self-relevant consequences such as the attainment of goals and/or maintenance of values (Celsi & Olson, 1988). ISPR, through felt involvement, affected a consumer’s motivation to attend to and comprehend information (Celsi & Olson, 1988). The higher the level of involvement, the closer attention the consumer would pay to the message (Petty & Cacioppo, 1986).
In a company crisis, involvement would be expected to determine whether the crisis news story was perceived and “tuned into”, determining the amount of attention paid as a function of the strength of self-relevant values, goals, needs and beliefs. In a crisis, these intrinsic factors would drive overt behaviours such as search, and cognitive behaviours such as attention and comprehension, determining one’s motivation to process messages about the crisis. Thus, it is contended that in the company crisis event, intrinsic sources of personal relevance (ISPR) determine the consumer’s motivation to attend to media messages about the event and process messages, including the company account. A consumer’s perception or feeling of personal relevance for an event was an acute state that only occurred at certain times and in certain situations (Celsi & Olson, 1988). Even events that were extremely important to an individual are not experienced as personally relevant at all times (Celsi & Olson, 1988).

A wide variety of specific stimuli, cues and contingencies in a consumer’s immediate environment may function as situational sources of personal relevance (SSPR). These stimuli were sources of felt involvement if they activated self-relevant consequences, goals and values, and if the representations of these stimuli were perceived to be closely associated with
these consequences, goals and values (Celsi & Olson, 1988). Because most situational factors are dynamic and changeable, the felt involvement created by situational factors tends to be transitory. For example, with the Exxon Valdez oil spill, repeated media stories about the event could have activated important personally relevant goals, concerns, needs, interests, beliefs and values (i.e., ISPR) such as “companies should be environmentally responsible” or “Exxon should take responsibility for its actions”. Thus it is contended that reminder cues, such as repeated media stories, act as SSPR, each time reactivating ISPR and the involvement process. However, if the crisis receives little publicity (reducing the situational source of personal relevance) then the consumer may quickly forget about the crisis. Therefore, situational sources of personal relevance (repeated media exposure about the crisis, and any other factor that reminded one about the crisis) would interact with intrinsic sources of personal relevance (beliefs about what the company ought/ought not to have done, or values, or interests that are activated) determining felt involvement. Felt involvement, in turn, acts to impact consumer emotions. Therefore it is argued that the degree of felt involvement determines the intensity of emotions experienced in the company crisis.

These emotions may be intensified depending upon the extent to which number of media exposures (SSPR) impacts on the consumer’s goals, values and beliefs (ISPR). While this model is iterative, with each media impact (as SSPR) reactivating consumer’s goals, values and beliefs (ISPR) over a period of time, recreating an emotion experience, with the emotion-involvement relationship being reciprocal, testing this iterative aspect of the model was beyond the scope of this thesis, as was testing the impact of reminder cues.

In sum, it has been argued that, instead of the poorly conceptualised construct of personal relevance, and instead of AET’s goal-oriented approach to personal relevance, the concept of felt involvement can be applied to company-related crises. As both Bower and Cohen (1982) and Srull and Wyer (1986) pointed out, the intensity of emotional reaction is adjusted depending on the personal importance attributed to the event (in McCornack & Levine, 1990). Thus involvement determines the level of processing of the crisis news story, including the company account, with the level of involvement with the event determining emotion intensity. Thus, the higher the involvement, the more intense the emotions elicited. Involvement therefore refers to the primary appraisal of the importance of the crisis to a consumer’s concerns, values, needs, interests, goals and beliefs. The knowledge to date has indicated that no prior researcher had applied the concept of involvement to company crises.
AET and Secondary Appraisal

For appraisal theorists, including AET and WAT, while primary appraisal determined emotion intensity, it led to the secondary level of appraisal, which determined the experience of discrete emotions. Secondary appraisal entailed assessment of the context, and those involved, and was where causal attributions were made (Weiss & Cropanzano, 1996). As noted earlier, where most appraisal theorists differ is in the specific dimensions proposed as relevant to the secondary appraisal (Weiss & Cropanzano, 1996). Although AET used Stein et al.’s (1993) goal-based decision tree, Weiss and Cropanzano (1996) did not endorse this dimensional structure over any other. As a result, the argument was made that Weiner’s attribution theory was more appropriate to apply to company crises.

Application of Weiner’s Attribution Theory (1986, 1995b) to secondary appraisal.

The secondary appraisal process involves causal judgments, which result in an assignment of responsibility and determined emotion. Earlier, in the section on attribution theory, it was noted that a number of researchers (e.g., Folkes, 1984; Folkes et al., 1987; Jorgensen, 1994, 1996) had tested Weiner’s secondary appraisal sequence, finding that his appraisal dimensions of locus, controllability, and stability were crucial to determining anger arousal in company failure situations. Further, it was argued that Weiner’s (1986) third causal dimension, stability, while suitable to apply to service and product failure scenarios, did not apply to company crises, as these could not be expected to be caused by a recurring fault. Therefore, it was argued that, in line with Weiner’s contention and findings by researchers (e.g., Jorgensen, 1996), that in a company crisis scenario, the secondary appraisal process included causal determinations of locus and controllability, which resulted in judgments of responsibility and, in turn, emotions. Thus, for secondary appraisal, the proposed model used Weiner’s (1986, 1995b) attributional theory (WAT), which argued that attributions about locus and controllability determined the degree of responsibility attributed to the company, which in turn, determined emotional and behavioural reactions. While WAT had its focus on anger and sympathy, congruent with AET, it is argued that these secondary attributions result in a range of discrete emotions.

AET and Affective Reactions – Emotion and Mood

AET contended that, following the secondary appraisal process, an event elicits affective responses of both emotion and mood (Weiss & Cropanzano, 1996).
AET and Emotion.

There are many definitions of emotion. Emotion may be considered a hypothetical construct that includes feeling as one of several components consisting of motor expression, physiological changes, action tendencies and cognitive processing (Scherer, 2000). It may be defined as an episode of interrelated, synchronised changes in these four components in response to an event considered to be of major significance (Scherer, 2000). Current approaches to emotion included those that viewed emotion as varying continuously along some limited number of affective dimensions such as pleasure and arousal, and those in which emotion was considered to be primarily organised as a set of specific, discrete affective states such as happiness, sadness, disgust and so on (Bradley, 1994). These states last a limited amount of time, ranging from a few minutes to a few hours and had one or more causes or identifiable targets (Oatley & Jenkins, 1996).

Congruent with other attribution/appraisal theories, AET argued that emotion consisted of specific discrete emotional states brought about by the action of cognitive appraisals and that, ultimately, an emotion was a reaction to an event (Weiss & Cropanzano, 1996) directed at someone or something (Frijda, 1993). AET contended that an event elicits affective responses of emotion and mood, with the secondary level of appraisal resulting in the experience of discrete emotions like anger, sadness and joy (Weiss & Cropanzano, 1996). AET argued that, in work scenarios, specific emotions were likely to predict specific behaviours with discrete emotions having limited and specific action tendencies (Weiss & Cropanzano, 1996).

A number of taxonomies of basic emotions exist. Working from an evolutionary perspective, Ekman (1992) concluded that there were at least six basic emotions (anger, fear, sadness, enjoyment, disgust and surprise), Plutchik (1994) offered eight (joy, sadness, acceptance, disgust, fear, anger, expectation and surprise), while Izard (1977), following a physiological approach, offered 10 (fear, anger, enjoyment, interest, disgust, surprise, shame, contempt, distress and guilt) (in Weiss & Cropanzano, 1996). AET also noted Shaver, Schwartz, Kirson and O’Connor’s (1987) semantic classification, which clustered 213 words into six primary families of anger (with disgust subsumed under anger), fear, joy, love, sadness and surprise. Shaver et al.’s (1987) classification is used in my study.
Investigation of consumer emotions in reaction to organisations is a new research field (Zerbe & Härtel, 2000). Richins (1997) reported that most studies of consumer affect have focused on consumers’ responses to advertising (e.g., Derbaix, 1995; Mowen, Harris, & Bone, 2004). Recent marketing research on consumers’ need for justice following a product or service failure have focused on the concept of emotions in the form of satisfaction and dissatisfaction impacting behaviour. Dissatisfaction had been defined as a negative emotion, that is, an affective response to a specific consumption experience (Woodruffe, Cadotte, & Jenkins, 1983, in Blodgett, Granbois, & Walters, 1993). Folkes (1984) contended that dissatisfaction seemed too tepid to encompass the problem of the irate consumer, especially considering possible behavioural manifestations of anger. Other studies included emotions generated by product usage (e.g., Holbrook, Chestnut, Oliva, & Greenleaf, 1984), consumption experiences (e.g., Mano & Oliver, 1993; Richins, McKeage, & Najjar, 1992) and services marketing experiences (e.g., Chiu, 2002; Scherer & Ceschi, 1997) although the primary emphasis in this field has remained on satisfaction and dissatisfaction (Folkes, 1984). Yet very little consumer research examined how distinct negative emotions differentially impacted behaviours (Luce, 2001).

The study of consumer emotions applied to company and service failure situations is still in its infancy. While Jorgensen (1994, 1996) and Folkes et al. (1987), established that company-directed anger and sympathy may be experienced following a crisis or service failure, common sense suggests that other emotions may be elicited. Apart from anger and sympathy, the emotions that crises elicit in consumers have not been explored, although Frederickson et al.’s (2003) study on resilience following the September 11, 2001 terrorist attacks found that people recalled experiencing many different emotions. However, to my knowledge, no consumer study has examined the range of emotions that company crises elicit in consumers, nor how, or whether, they differentially impact consumer behaviour.

Congruent with AET and Weiner’s (1986, 1995b) Attributional Theory, I adopt the cognitive appraisal perspective on emotions. Therefore, it is argued that in a negative event such as an organisational crisis, the secondary level of appraisal results in the experience of discrete emotions (using Shaver et al.’s 1987 classification) of anger, fear, joy, love, sadness and surprise. However, while AET focused on events generating emotion and mood, emotion is central to the proposed model. Congruent with AET, it is argued that specific emotions are likely to predict specific affect-driven behaviours, with discrete emotions having limited and specific action tendencies (Weiss & Cropanzano, 1996).
**Affect and Time – Emotion Episodes**

While AET characterised emotions as discrete reactions precipitated by specific events, Weiss and Cropanzano (1996) incorporated Frijda’s (1993) conceptualisation of emotion episodes into their model. The authors noted Frijda’s (1993) findings that an emotional experience comprised a series of emotional transactions with the environment, all coherently organised around a single underlying theme. Frijda (1993) referred to this as an emotion episode, a situation in which a single event of affective significance led to the unfolding of a series of sub-events that can produce a distinct, even opposite emotional response. This emotion episode refers to a series of emotional experiences precipitated by a single emotional event, with the key element of the concept being that those episodes represented the ebb and flow of emotional experience over time (Weiss & Cropanzano, 1996). Frijda (1993, p. 396) suggested that during this episode, the person remains in a state of “continuous emotional engagement” and that the series of after shocks should continue to alter the normal affective pattern. This concept of the emotion episode was particularly salient the more the event was personally relevant. As argued earlier, in applying this to a company crisis, this meant that the higher the level of involvement in the crisis, the stronger was consumers’ emotions. However, to elicit an “emotional episode” that preyed upon consumers’ minds, influencing on-going emotions (as envisaged by Frijda, 1993, and AET), a company crisis would require an extremely high level of consumer involvement with the crisis. Such a crisis is likely to potentially affect a small proportion of the consumer population. For example, during Australia’s 1996 Kraft peanut butter salmonella contamination and recall, parents of the children hospitalised due to the poisoning may have experienced emotion episodes. However, testing this is beyond the scope of this thesis.

**AET: Affect-driven Behaviour**

Both the social psychological approach and the cognitive emotion approaches had as central to their conceptualisation the idea of behavioural or action intentions following a cognitive and affective appraisal. While the first approach normally viewed attitudes as the precursor of purchase intentions with purchase intentions as precursors of purchase behaviour, the cognitive emotion theorists viewed action tendencies as resulting from emotions. In a work scenario, AET viewed affective reactions as driving both affect-driven behaviours and attitudes, with attitudes in turn influencing judgment-driven behaviours. Thus, AET drew a distinction between affect-driven and attitude-driven behaviours. Because affect levels could fluctuate, Weiss and Cropanzano (1996) suggested that affect-driven behaviours would be of a relatively short duration and high variability.
Application of affect-driven behaviour to the model.

Earlier I examined studies by Folkes et al., (1987) and Jorgensen (1994, 1996), finding that attributions impacted emotions that, in turn, impacted both behaviour and attitudes. Specifically, studies by Folkes et al. (1987) and Jorgensen (1996) demonstrated that anger resulted in behaviours of complaint and negative purchase and investment intentions. In the section on emotions, applying AET, the argument was made that emotions directly impacted both consumer behaviour and attitudes. AET contended that both attitudinally-driven and affect-driven behaviours exist. While not disputing this, it is argued that, immediately after a crisis event, as evidenced by company crisis studies, when an appraisal results in emotion, these emotions in turn act as the main behavioural driver. Thus, congruent with AET, it is argued that specific emotions are likely to predict specific behaviours with discrete emotions having limited and specific action tendencies (Weiss & Cropanzano, 1996). A number of consumer behaviours are likely following a negative event. Product and service failure studies have investigated a range of behaviours including complaining (e.g., Bruner, James, & Hensel, 2001), switching (e.g., Zeithaml, Berry, & Parasuraman, 1996), exit (e.g., Blodgett, Granbois, & Walters, 1993), loyalty (e.g., Patterson, Johnson, & Spreng, 1997), and taking legal action or doing nothing (Singh, 1988). Additionally, Friedman (1996) noted that behaviours of strikes, product boycotts, attacks and “phone-ins” designed to clog lines. However, it is not known which behaviours may be crisis-specific.

AET contended that affect-driven behaviours would be of relatively short duration and high variability, but that emotions also drive attitude, which in turn, drives judgment-driven behaviour. This could explain more durable long-term behaviour exhibited by consumers following a crisis. For example, case study reviews by Weinberger and Romeo (1989) found that, amongst certain demographic groups, the toxic shock crisis involving Procter and Gamble’s Rely tampon resulted in lower sales five years later, while Johnson & Johnson’s Tylenol sales were below pre-crisis level three years later.

It is also contended, congruent with other researchers, that when prediction of behaviour is of primary concern, testing of behavioural intentions is most appropriate. There appears to be consensus in the social psychology literature that behavioural intentions follow from cognitive and affective appraisals, but precede action, with behavioural intentions viewed as the immediate antecedent of behaviour (Engel et al., 1993). Behavioural intentions offered the greatest predictive power (Granbois & Summers, 1975).
AET and Attitude

According to AET, emotions directly impact affect-driven behaviour and attitude, while attitude also impacts judgment-driven behaviour. AET states that attitude-driven behaviours are directly influenced by overall evaluations and result from well thought out decisions.

Application of attitude to the model.

It had earlier been argued in a review of studies on accounts, attitudes and purchase intentions by Griffin et al. (1991), Jorgensen (1996) and Weinberger et al. (1981), that attitude was not a reliable predictor of purchase intentions behaviour when applied to organisational crises. Weinberger et al.’s (1981) studies on negative publicity for an automobile manufacturer provided compelling evidence that a relationship existed between attitude and purchase intentions and that they covary consistently. However, Jorgensen’s (1996) study of a fatal airline crash, and illnesses and deaths resulting from taking an over-the-counter drug and Griffin et al.’s (1991) study featuring a food poisoning incident, suggested no correlation between attitude and purchase intentions. Furthermore, Burke, Milberg, and Smith’s (1993) study concerning negative publicity surrounding food brands indicated mixed findings on attitude-purchase intentions congruence.

Congruent with AET, it is proposed that emotions drive attitudes, and that attitudes drive judgment-driven behaviour. This may go some way to explain the lack of consistent findings reported in the attitude-purchase intention studies.

AET and Affective Predispositions

AET suggests that affective traits act as latent predispositions that help to set the stage for individuals to have more or less intense bouts of emotion, in particular, a predisposition to react more strongly to negative events (Weiss & Cropanzano, 1996). These traits are partially rooted in the individual’s biology (Weiss & Cropanzano, 1996). One of the most influential models in the organisational sciences has been the positive and negative affectivity (PA/NA) model of mood structure (Weiss & Cropanzano, 1996). However, not all research has been supportive of this (e.g., Meyer & Shack, 1989 in Weiss & Cropanzano, 1996). Weiss and Cropanzano (1996) noted a number of problems with the NA/PA scale, notably conceptual ambiguity regarding the two dimensions of NA and PA and the Positive and Negative Affectivity Schedule (PANAS by Watson, Clark, & Tellegen, 1988) most used to measure it.
Application to the model.

Congruent with AET, for the proposed model, it is predicted that individuals high in Negative Affectivity (NA) would have stronger emotional reactions to a company crisis, while those high in PA would react less strongly. Thus, if the sample of subjects contained a disproportionately number of people high in NA or PA, the results could be skewed. Thus, in any experiment, it is suggested that this effect needs to be controlled for by prior measurement of levels of NA and PA through use of the PANAS scale (Watson & Tellegen, 1985; Watson et al., 1988).

AET and Affective Reactions – Mood

AET contends that, following the secondary appraisal process, an event elicits affective responses of mood, as well as emotion, and that mood can influence memory, evaluative judgments, processing strategies and social behaviours (Weiss & Cropanzano, 1996).

AET and mood.

AET contends that events have affective significance in that they generate an emotional reaction or mood change in people (Weiss & Cropanzano, 1996). While emotions are affective states directed at someone or something (Frijda, 1993), AET refers to mood as affect disconnected from its causal object (Weiss & Cropanzano, 1996). Moods can arise as residual states after events or in response to the recall of previous emotional events; or they can arise from factors like the weather, having nothing to do with particular events (Weiss & Cropanzano, 1996). Zillman’s (1979) Excitation Transfer Theory proposed that individuals’ emotional experiences are enhanced when people are already in aroused states (in Weiss & Cropanzano, 1996). Additionally, mood has diverse effects on processing strategy. As mood influences recall (people in a positive mood recall more positive items from memory than negative items and people in a negative mood recall more negative items than positive items), then it should also influence the judgments based on these recollections (Weiss and Cropanzano, 1996). In addition to Weiss and Cropanzano (1996), other researchers have argued for mood testing before an affective manipulation. A large proportion of research has investigated the influence of mood on the judgment process (e.g., Forgas, 1991; Innes & Ahrens, 1991; Schwarz & Bless, 1991), specifically processing strategy, which, in turn, affects judgments and behaviour (Sinclair & Mark, 1992).

Application to the Model

While the focus in AET is on elicitation of emotion and mood following an event, the proposed model emphasises elicitation of emotion, rather than mood following a company
crisis. However, according to AET, pre-existing mood may influence consumers’ processing strategy. Positive moods signal that “all is well with the world” resulting in lazy, superficial, heuristic processing characterised by a lack of logical consistency and little attention to detail (Forgas, 1991; Schwarz & Bless, 1991; Sinclair & Mark, 1992). For instance, happy individuals attend more to heuristic cues than to argument strength (Schwarz & Bless, 1991). Negative moods, in contrast, signal problematic, difficult situations triggering careful, analytical and ‘tight’ cognitive strategies (Forgas, 1991) characterised by considerable attention to detail, careful step-by-step analysis of the available information and a high degree of logical consistency (Schwarz & Bless, 1991; Sinclair & Mark, 1992).

An affective response to an organisational crisis may be interpreted as being caused by the event, or as being caused by one’s own particular emotional state, for instance, being in a bad mood at the time of the event. Congruent with AET, it was agreed that mood can influence memory, evaluative judgments, processing strategies and social behaviours and thus should be controlled for by prior testing.

In sum, congruent with AET, it is argued that mood influences causal judgments and may create bias in assessment of messages. Also, people in a negative mood are more likely than those in a positive mood to have stronger negative emotional reactions that impacts their behavioural intentions. This strongly suggests that, in any study that involves appraisals and emotion elicitation, mood factors should be controlled for by prior measurement.

**Summary of Argument Regarding AET**

The above section examined Affective Events Theory, arguing that AET formed a suitable framework for examining company crises. However, applying findings from other studies using Weiner’s (1986, 1995b) attributional theory, the proposed model integrated other theoretical constructs of involvement and Weiner’s secondary appraisal into the AET framework.

It was argued that, following a company crisis:

1. Congruent with AET, there is a primary appraisal of the importance of the event, which results in the determination of affective intensity. However, the construct of involvement was argued to be better conceptualised than AET’s use of goal-related personal relevance.
2. Congruent with AET, it was argued that next there is a secondary appraisal, which determines the type of emotional response. While AET uses a decision tree and focuses on responses of emotion and mood, instead the proposed model integrated Weiner’s attributional model. Specifically, it was argued that the secondary appraisal process involves causal judgments, which result in an assignment of responsibility and give rise to various emotions. Studies in company crisis and product failure scenarios have demonstrated that causal conditions and attribution can be applied at organisational level.

3. Next, AET contends that events produce affective reactions (emotion and mood). Following the earlier studies on crisis scenarios, it was argued that following an organisational crisis, a range of emotions may be elicited.

4. AET suggests that an affective reaction may not occur as an isolated emotion, but as an emotion episode. This emotion episode is more likely to occur when there is high personal relevance. While it is agreed that, following a company crisis, emotion episodes may result where there is an extremely high level of involvement, testing this aspect is outside the scope of this thesis.

5. AET contends that affective reactions drive affective behaviour, which is of limited duration and high variability. Congruent with AET, the proposed model suggests that specific emotions drive specific behaviours, with behavioural intentions as the behaviour precursor. Thus, it was predicted that emotions (e.g., anger, fear, sadness) would impact consumer behaviours (e.g., purchase intent, investment intent, complaining, loyalty and positive word of mouth).

6. AET argues that affective reactions also drive attitude, while attitude drives judgment-driven behaviour. Congruent with AET, it was proposed that affective reactions drive attitudes, but attitudes drives attitude-driven behaviour.

7. While AET focuses on the elicitation of both emotion and mood, AET also suggested that mood influences processing strategy. Congruent with AET, it is contended that mood should be controlled as it affects attributions and emotional intensity.

8. AET also suggested that affective reactions may be partially explained by affective predispositions. Congruent with AET, it is agreed that, as those high in negative affect (NA) react more strongly to negative events, and those high in PA react less strongly, NA and PA should be controlled for in studies that explore affective reactions.

These tenets of AET form the underlying structure to the model.
Causal Dimensions as Constituting a “Crisis Typology”

In this section it is posited that, following a crisis-precipitating event, the best organisational account to reduce negative consumer reactions may be contingent upon the causal conditions of the crisis. That is, whether the crisis cause was internal to the company, or external, and controllable by the company, or uncontrollable, or else an ambiguous combination of these. I argue here that consumers prefer accounts that reflect the level of responsibility that matches the crisis causal conditions. I create a managerial decision tree to guide selection of the account in the fast-paced decision-making period following the crisis. In doing so, I argue for the application of a new crisis typology based on causal conditions.

A number of researchers have developed crisis classifications. Results from questionnaires to the Fortune 1000 companies from the University of Southern California’s Center for Crisis Management found that crises can be grouped statistically into major clusters or families (Mitroff & Pearson, 1993). These range from technical and economic crises (such as extortion, environmental damage, and boycotts) to human and social crises (such as terrorism or on-site product tampering), with crises such as breaks (product defects, operator error) falling in between these crisis clusters (Mitroff & Pearson, 1993). Crises were perceived to be primarily technical or economic in origin, or else primarily human or social in origin (Mitroff & Pearson, 1993).

However, other researchers developed a crisis typology containing internal and external factors. Mitroff, Shrivastava, and Udwadia (1987) classified crises along an internal-external dimension and a technical-social dimension, resulting in four crisis types. Shrivastava, Mitroff, Miller, and Migliani (1988) referred to the internal-external dimension and social-political factors, as did Egelhoff and Sen’s (1992) model. The latter used a similar typology of four crisis types, including an internal-external dimension (those belonging to the environment of the firm or the remote environment) that involved either technical failures or social-political factors (Egelhoff & Sen, 1992).

In contrast, I propose classifying crises by their underlying cause, that is, by their causal condition, in order to facilitate managerial decision making during the fast-breaking and cognitively demanding crisis period. The use of causal conditions for crisis management has been previously posited by Coombs (1995) who argued that selection of crisis response strategies should be shaped by the crisis situation. Coombs (1995) used attribution theory to develop a decision flow chart to assist managerial decision-making, arguing that the crisis strategy should be determined by how the publics perceive the three dimensions of locus,
controllability and stability. Yet Coombs’ (1995) crisis type matrix was based on locus (internal/external) and intentionality (intentional/unintentional), relating the latter dimension to controllability. He argued that intentionality reflected controllability, as an intentional act is more controllable than to an unintentional act. Yet intentionality, as noted earlier, referred to whether an act, or its outcome, was intended (Weiner, 1995). The controllability dimension, in contrast, referred to the extent to which a cause was seen as being under the volitional control of the individual (Kent & Martinko, 1995) and could include preventable issues. While my posited typology differs to Coombs (1995), congruent with this researcher, it is argued that the crisis cause should determine the communicated account.

Causal Condition and Accounts

In the earlier section examining crisis and service failure studies using Weiner’s (1986, 1995b) attributional theory, I argued that different causal conditions explained differing consumer outcomes, and found that causal ambiguity resulted in stronger consumer anger and lower purchase intentions. In this section, I investigate a study that examined interactions between causal conditions and accounts and argue that causal conditions may determine best account choice.

In an interpersonal study, Weiner et al. (1991) examined interactions between accounts (denial, confession, plus a control of “nil response”) under three causal conditions (internal/controllable, external/uncontrollable, and ambiguous), finding that these interacted to impact dependent variables, including anger. That is, different accounts were more or less effective, depending on the causal condition. For denial, anger was highest in the ambiguous condition, followed by the internal/controllable, then the external/uncontrollable, conditions. For confession, anger was highest in the ambiguous situation, followed by the external/uncontrollable, then the internal/controllable, conditions. For the control response of silence, anger was highest in the external/uncontrollable condition, followed by the ambiguous, then the internal/controllable, conditions. Thus, anger levels were determined not only by differing responses, but by differing causal conditions.

Extrapolating from Weiner et al.’s (1991) interpersonal study, it is contended that, when applied to crisis situations, consumers’ preferred accounts may be contingent upon the causal conditions of the crisis. That is, the crisis cause may determine the best account choice in order to minimize negative consumer reactions.
Matching Accounts to Crisis Cause using Weiner’s (1995b) Responsibility Process

In the section above, I argued that the effectiveness of the company account may be contingent upon the crisis cause. In this section, I use Weiner’s responsibility process to posit that consumers would prefer accounts that reflect the level of responsibility that matches the crisis cause. I have created a flow chart to aid managerial decision-making following a crisis, congruent with Weiner’s (1995b) responsibility process.

According to Weiner (1995b), accounts are used as responsibility reduction strategies, locating the cause of the negative outcome to either internal or external factors, and controllable or uncontrollable factors, with concomitant levels of accepted responsibility. Thus the cause may be either internal or external, and controllable or uncontrollable, or combinations of these, such as internal and uncontrollable or external and controllable causes. Lowest responsibility acceptance was in disavowing either the event or its negative outcome, next was ascribing the cause of the outcome as due to external factors, then ascribing the cause to internal but uncontrollable causes, followed by determining the cause as internal and controllable but identifying mitigating circumstances, such as a higher moral goal, with the highest acceptance of responsibility being taken in an apology and confession (Weiner, 1995b, see Table 7). Weiner (1995b) did not discuss silence, which is the refusal to answer questions of responsibility.

Table 7 Weiner’s (1995b) responsibility process

<table>
<thead>
<tr>
<th>Account</th>
<th>Location of responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial of responsibility</td>
<td>Due to external and uncontrollable factors</td>
</tr>
<tr>
<td>Excuse: due to unforeseen circumstances or consequences</td>
<td>External factors</td>
</tr>
<tr>
<td>Excuse: extenuating circumstances, consequences</td>
<td>Internal but uncontrollable factors</td>
</tr>
<tr>
<td>Justification through higher goals being served</td>
<td>Internal and controllable but with mitigating factors</td>
</tr>
<tr>
<td>Confession: admission of responsibility</td>
<td>Internal and controllable – no mitigating factors</td>
</tr>
</tbody>
</table>

Using Weiner’s (1995b) responsibility continuum, I posit that an effective account strategy involved matching the account to the crisis, using an account that reflected the same location of responsibility as the crisis itself. Thus, when the corporate account matches the crisis cause, negative consumer reactions, such as anger and fear or negative behavioural intentions, may be mitigated. Conversely, if the company account was not appropriate to the
crisis, these negative reactions may increase. I also contend that crisis causes may be internal/controllable, external/uncontrollable, an ambiguous combination of the preceding two causes, and internal/uncontrollable or external/controllable. To my knowledge, the latter two crisis causes have never been empirically examined. Additionally, consumer-preferred accounts may differ for each crisis cause.

My argument is therefore that when the crisis cause is internal to, and controllable by the company, and there are no mitigating circumstances, confession is the consumer-preferred account. An example of such a crisis was Pan Pharmaceuticals’ $400 million recall of pharmaceutical products, where the crisis cause was safety and quality breaches by the company (Strong, 2003). While not used by Pan’s CEO, there is increasing corporate use of confession. This was used by Coca-Cola’s Chairman and CEO, Douglas Ivester, who published a personal apology, set up a consumer hotline and offered to pay all medical bills when 200 people in Europe fell ill after drinking Coke (Coke’s hard lesson, 1999).

When the cause is internal to, and controllable by the company, but there are mitigating circumstances, justification is the preferred account. An example of this type of crisis is that involving the miscarriage drug, diethylstilbestrol (DES), prescribed to millions of pregnant women at risk of miscarriage in the United States from 1938 to 1971 (CDC, 2000). DES, a synthetic estrogen, has since been found to cause vaginal cancer, infertility and pregnancy complications in those daughters exposed to the drug in utero (CDC, 2000).

When the cause was internal to, but not controllable by, the company then an excuse notifying consumers of these factors is appropriate to mitigate negative consumer reactions. For example, in 1989 a CBS 60 Minutes program highlighted the link between Alar, a chemical used to regulate the growth of fruit, and cancer (Dodd & Morse, 1994). The product was unwittingly used by apple growers (internal) supplied by a chemical manufacturer (uncontrollable).

Excuse is also appropriate when the cause is external to, but controllable by, the company. For example, in Australia’s biggest food recall (of Kraft peanut butter in 1996 following widespread salmonella poisoning and one related death), the crisis cause was external to the company - supplied roasted peanuts were contaminated with rodent faeces (Jones, 1996a,b). While Kraft shifted blame to the peanut supplier who roasted the peanuts, the company could have checked its raw material for contamination before bottling (Jones, 1996a,b), therefore the crisis was controllable by the company.
Where the crisis cause is external to, and uncontrollable by, the company (that is, the company was not at fault for the crisis), denial of responsibility by locating the cause to those responsible is the preferred account. An example is Australia’s Panadol paracetamol recall where a saboteur laced supermarket paracetamol packets with strychnine (Lloyd, n.d.).

However, with an ambiguous cause (that is, the crisis includes both internal and external, controllable and uncontrollable causes), as this results in stronger anger, the consumer-preferred account is confession, which locates the cause to internal/controllable factors. An example of an ambiguous crisis was the recall of 6.5 million Firestone tyres by Bridgestone, costing between $300 million and $600 million (Cox & Oshima, 2000). The tyres were on Ford’s Explorer utilities, which were involved in 1400 accidents causing 88 deaths in the USA, when the tread peeled away at high speeds, often causing the vehicle to flip (Jac Nasser’s biggest test, 2000). Firestone and Ford “have been squabbling, pointing fingers and providing an unclear picture of what is going on”, Muller, Green, St. Pierre, and Moore (2000) reported. “The public is assigning blame and cause to both Ford and Firestone as if they are the same” (Connelly, 2000), indicating the ambiguous nature of the crisis cause.

The final account of silence, or a refusal to comment, was not a preferred option. Although Kaman Lee’s (2004) study found that “no comment” rated ahead of excuse (blame-shifting) and justification (harm minimization), but lower than confession components, a US poll of 1,000 members of the public found that almost two-thirds felt that a “no comment” response almost always meant that the organisation was guilty of wrong-doing (Wilcox et al., 1998). This may suggest that cultural factors play a role in consumer-preferred accounts.

It is proposed that these crisis causes may be used as a crisis typology to facilitate managerial selection of the account best suited to a particular crisis cause, reducing negative consumer impact. From this, I have created the decision tree shown in Figure 7.
Summary of Crisis Typology

In this section I had argued that, following a company crisis breaking out, the best account choice was contingent upon the causal conditions of the crisis, that is, the crisis type. The argument was made that company accounts and crisis types (either internal or external, controllable or uncontrollable, or a combination of these) interacted to impact consumer response. Thus, in certain causal conditions, different accounts would be preferred. Further, an effective account was one where the level of responsibility accepted matched the perceived crisis event cause. Thus, a correct match between the responsibility level in the account and crisis type would result in less negative consumer reactions. Conversely, if the company account was not appropriate, negative consumer reactions may be increased. For best consumer outcomes, it was also important that any company accounts clear unnecessary confusion and reduce causal ambiguity. I created a decision tree to facilitate managerial decision-making following the crisis outbreak.

Moderators of Company Accounts

According to Baron and Kenny (1986), a moderator is a qualitative (e.g., gender, class) or quantitative (e.g., level of reward) variable that affects the direction and/or strength of the relationship between an independent or predictor variable and a dependent or criterion variable. In this section, the mechanisms that influence whether accounts are accepted or
rejected are examined. It is argued that credibility and reputation are moderators of company accounts.

**Credibility of Message and Source**

Credibility assessment refers to any attempt to ascertain truthfulness, with the need or desire to make such an assessment found in every human context (Yuille, 1989). The importance of credibility assessment in the legal arena and elsewhere has resulted in the development of a new body of research traversing fields of social psychology, forensic psychology and psychophysiology. The importance of credibility in acceptance of persuasive messages has also been recognised by advertising researchers who suggested that lack of credibility may have impeded persuasive effects in advertising (Gotlieb & Sarel, 1991).

A number of factors promote acceptance of messages as credible, assisting managers in their use of accounts. First, as human communication is based on conventions, we presuppose that a speaker is telling the truth (Mitchell, 1996). McCornack and Parks (1986, in Miller & Stiff, 1993) found that this “truth bias” explains the difficulty that people have in detecting deception from a relational partner. Second, Watson (1968) found that the observer may well look for evidence that supports the story and fail to look for disconfirmatory evidence (in Mitchell, 1996). Third, because people are cognitive miser (Taylor & Fiske, 1978) they often rely on simple decision rules or heuristics to make judgments of veracity (Miller & Stiff, 1993). Any of these factors ensure that messages are accepted at face value. For company accounts, this may mean that there is a tendency for the message to be accepted as credible.

However, when the message source was less credible, discounting of the message may occur, an effect noted by Gotlieb and Sarel (1991) in a study on comparative advertising. Griffin et al. (1991) manipulated source credibility (reports from city health officials versus unconfirmed reports) in a negative publicity scenario involving salmonella poisoning at a chicken franchise, finding that source credibility was an important situational factor leading to changes in consumer attitudes, although not purchase intentions. Griffin et al. (1991) also suggested that a highly credible source drew the receiver into making a stronger attribution regarding the message. In an investigation of impact of negative product information, Weinberger et al. (1991) found that a credible source (in the form of a Consumers’ Union contention on the “60 Minutes” TV news program that a vehicle had handling faults) had an immediate and severe effect on sales. A highly credible source of information created a stronger attribution regarding the message. It is therefore suggested that in any testing of accounts, the use of a credible spokesperson and message is important.
Researchers such as Herbig, Milewicz, and Golden (1994) argued that credibility was dependent upon company reputation. Siomkos and Shrivastava (1993) also argued that company reputation determined credibility, adding that it determined consumers’ level of trust. Reputation is an overall evaluation of organisational achievements (Fombrun, 1996). A favourable corporate reputation is a vital condition for, and means of, creating a sound commercial basis from which the success of the company eventually stems (Van Riel, 1997).

Thus, it is contended that company reputation acts to increase the credibility of both the source and message, reducing the likelihood that the message will be discounted. Evidence for this contention is supplied by a number of studies in the product recall domain, which provided indications that in a crisis situation, a familiar and highly respected company was regarded more favourably and had a more favourable outcome than a less familiar company. A series of product recall studies found company reputation impacted consumer outcomes. Consumers were less negatively influenced against future purchase of other products from a high reputation company (Siomkos & Kurzbard, 1994). Consumers perceived a more well-known and respected company as more successful in handling the crisis than one less well known and respected (Siomkos, 1989; Siomkos & Shrivastava, 1993). Negative effects of a recall may be minimised if the company is highly respected (Mowen, Jolly, & Nickell, 1981) or familiar rather than unfamiliar (Mowen, 1980). Consumers perceived the degree of danger associated with a product defect as relatively small when the product harm crisis involved a high reputation and well-known company, as opposed to a company with a less favourable reputation (Siomkos & Kurzbard, 1994). Mowen (1980) found that consumers perceived a familiar company as significantly less responsible than an unfamiliar company for a product defect and Mowen and Ellis (1981) found that an unknown company was viewed as more responsible for the product defect. Additionally, the defect was perceived as more foreseeable with an unknown company (Mowen & Ellis, 1981).

It is evident that a crisis involving a well-known company with a good reputation should result in less negative effects than for a lesser known and less reputable company. As well, the spokesperson from a highly reputable company should be regarded as more credible, acting to counter the discounting principle that operates when a message source is perceived as biased. Thus in any testing of accounts, consideration of level of company reputation is important.
In this section, the role of judgments of responsibility, and attributions regarding causal dimensions of intentionality and foreseeability are examined.

While AET saw secondary appraisals as directly impacting emotions, Weiner (1986, 1995b) contended that they did so via a path through responsibility. Additionally, Weiner (1986) also envisaged use of intentionality and foreseeability, originally posited by Heider (1958, in Hewstone, 1989) as being applied to failure situations.

**Responsibility**

While responsibility had been briefly covered in the section on Weiner’s attribution theory, this section extends the argument.

Earlier, in the section on secondary appraisal, I argued for the use of Weiner’s (1986, 1995b) attributional theory (WAT) which contended that attributions about causal conditions resulted in a judgment of responsibility and determined emotion, which in turn influenced behavioural reactions. Weiner’s (1995b) extended model saw mitigating circumstances (in form of accounts) intervening after the assignment of personal causality (internal locus), and controllability, but before an assignment of responsibility (Weiner, 1995b). However, Jorgensen’s (1996) structural equation model found that company accounts intervened after assignment of responsibility and directly impacted emotion, which in turn directly impacted purchase intentions. No significant pathway was found between company account and responsibility (Jorgensen, 1996). Thus, it appeared that Jorgensen’s (1996) test of two company accounts (denial, confession) did not provide mitigating circumstances to influence judgments of responsibility, as envisaged by Weiner (1995b). However, this may be because, of the five company accounts (no comment, denial, excuse, justification and confession), only some may act to provide mitigating circumstances to reduce perceived responsibility. Thus, congruent with Weiner (1995b), crisis accounts are envisaged as potentially impacting a responsibility judgment.

**Intentionality**

Intentionality, posited by Heider (1958) is critical to personal causality (Hewstone, 1989). Intentionality implies that an act was carried out purposively, with foresight and with knowledge of the possible consequences of the action (Weiner et al., 1987) and was avoidable (Hamilton & Sanders, 1992). Weiner (1995b) noted that, in the legal domain, one of the major determinants of responsibility was whether a controllable act was perceived as intentionally
committed or due to negligence, with judgment less harsh when the act and its outcome were unintended. The differentiation between intention and negligence was highlighted by the distinction between murder and manslaughter (Weiner, 1995b). If negative consequences result from reckless behaviour or negligence, these are unintended actions or consequences, e.g., running into a pedestrian because of reckless driving is unintentional, although negligent (Weiner, 1995b). Jones and Davis (1965, in Hewstone, 1989) and Weiner (1995b) considered intentionality an attribution.

One way of attributing intentionality to a corporation was reactive fault where corporations can, and do, act intentionally in so far as they enact and implement corporate policies (Fisse & Braithwaite, 1988). In the Firestone 500 tyre crisis, which arose from the failure of a large corporation to recall a radial tyre which proved to be unsafe in use, the company manifested a reactive policy of non-compliance for which there was a finding of liability (Fisse & Braithwaite, 1988).

Weiner (1986) raised several criticisms of using intentionality as a dimension (Kent & Martinko, 1995), arguing that this causal dimension failed to achieve the theoretical and empirical support of his three dimensions of locus, controllability and stability (Hewstone, 1989). However, both Betancourt and Blair (1992) and Weiner et al. (1987) provided empirical evidence that intentionality contributed to anger reactions, with the latter researchers linking it to anger reactions when giving excuses. Weiner’s (1995b) later conceptualisation of his model envisaged intentionality as influencing judgments of responsibility and determining the intensity of the behavioural outcome. Specifically, when a negative act or its outcome were perceived as unintentional, those involved were not judged as harshly as when the act and its outcome were unintended (Weiner, 1995b).

While intentionality appears untested in a crisis scenario, it is contended, congruent with Weiner (1995b), that this attribution impacts consumer reactions of emotions, behaviour and attitudes and requires measurement. Additionally, accounts, in the form of mitigating circumstances, may impact intentionality.

**Foreseeability**

Heider (1958) proposed five criteria for judging responsibility, including foreseeability, where people are held responsible only for effects they could have foreseen, even though these effects were not a part of the actors’ goals (in Schlenker, Britt, Pennington, Murphy, & Doherty, 1994). Foreseeability referred to how foreseeable were the potential outcomes of an
action. Folger and Cropanzano (2001) envisaged foreseeability as tied to responsibility, noting that it did not make sense to hold people morally responsible for events they could not control, or could not reasonably be expected to have anticipated. Similarly in law, if a person had been more careful, exercising more prudence or foresight, or an accident could have been prevented, this was considered negligent (Hamilton & Sanders, 1992). Negligence meant the accident was avoidable, but not purposive, and not intentional (Hamilton & Sanders, 1992).

The predominant form of corporate fault is likely to be corporate negligence (Fisse & Braithwaite, 1988). Corporate negligence is prevalent where communication breakdowns occur or where organisations suffer from collective oversight (Fisse & Braithwaite, 1988). Corporations are often regarded as blameworthy for causing harm or taking risks in circumstances where they could have acted otherwise, and for the inexcusable failure of an actor to perform an assigned task (Fisse & Braithwaite, 1988), thus the cause is foreseeable. An example is the 1987 Zeebrugge ferry disaster in which 150 passengers and 38 crew lost their lives (Fisse & Braithwaite, 1988). The official inquiry found the management of the ferry company, Townsend Thoresen (a subsidiary of P & O), at fault for failing to ensure adequate standard operating procedures on board the ferry (Fisse & Braithwaite, 1988).

Following Hamilton and Sanders’ (1992) contention that a claim of negligence results from an accident being preventable, comes the prediction that a company would be held more responsible for acts judged as foreseeable. While the attribution of foreseeability appears untested in a crisis scenario, or in service failures, the prediction is made that the attribution of foreseeability, like intentionality, would impact consumer reactions. Foreseeability may also be impacted by accounts that act as mitigating circumstances.

**Accountability**

The use of the word “accountability” can be traced to Greek philosophers, including Plato, Aristotle, and Zeno, who used the concept of accountability in their analyses of justice, duty, and punishment for wrong-doing (Schlenker et al., 1994). McKeon (1957) noted that historically, accountability had been a central concept in analyses of justice and social control, predating the notion of personal responsibility, which was introduced in the 18th century as a component of accountability (in Schlenker et al., 1990).

Current thinking is that accountability is a rule and norm enforcement mechanism through which societies control their members’ conduct (Beu & Buckley, 2001; Schlenker et al., 1990; Tetlock, Skitka, & Boettger, 1989). To be held accountable is to be held answerable
for your conduct by external audiences (Frink & Ferris, 1998; Schlenker et al., 1990) according to laws, rules and expectations (Mitchell & Scott, 1990, in Beu & Buckley, 2001), with judgments of responsibility and blameworthiness made, with concomitant punishment. Thus audience awareness of conduct is implied, but not articulated in discussions of accountability (Schlenker et al., 1990; Thoms, Dose, & Scott, 2002). Accountability has been examined in various disciplines (see Table 8).

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Psychology</td>
<td>Tetlock, Skitka, &amp; Boettger, 1989; Schlenker et al., 1990.</td>
</tr>
<tr>
<td>Management</td>
<td>Holland, 2002.</td>
</tr>
<tr>
<td>Ethics</td>
<td>Beu &amp; Buckley, 2001; McCall, 2002.</td>
</tr>
<tr>
<td>Health Care</td>
<td>Pawlson &amp; O’Kane, 2002.</td>
</tr>
</tbody>
</table>

Applying accountability to organisational crises.

The notion of organisations being held legally accountable for their actions was established in 1981 in a case where the Ford Corporation was charged with criminal homicide (and later acquitted) following deaths involving Ford’s Pinto (Schultz, 1996). During rear-end collisions, the Pinto’s fuel tank was prone to rupture, causing the vehicle to burst into flames (Prince, 2000), often incinerating those inside the vehicle. Although Ford was aware of the problem, it chose not to recall the vehicle. In fact, after a costs/benefits analysis, Ford estimated it would pay less for civil suits in wrongful death and injury cases than for the costs of changing safety designs (Prince, 2000). From this case came the courtroom precedent of legal acceptance of a corporation’s status as an intentional actor and “moral person” (Schultz, 1996). Corporations were held responsible for the outcomes of their policies and decision-making procedures partly because organisations have the capacity to change their policies and procedures (Fisse & Braithwaite, 1988).
While Frink and Klimoski (1998) called accountability the most fundamental factor in organizing and organisations, it is the most under-conceptualised factor (Thoms, Dose, & Scott, 2002). It is not considered to be an attribution, but rather a judgment.

Accountability theories.

The processes involved in determining accountability have been investigated by Schlenker et al. (1990) with the Accountability Pyramid, Schlenker et al. (1994) with the Responsibility Triangle, and Folger and Cropanzano (2001) with Fairness Theory. Fairness theory argued that fairness was based on accountability, which, in turn, was based on the three judgments of “would, could and should” that were made when a negative event occurs. These three inter-related judgments were modelled on Schlenker et al.’s (1990, 1994) responsibility triangle. What was common to these theories was that, following the judgments made about the cause of the event, the miscreant is allowed to provide mitigating circumstances in the form of accounts in order to reduce judgments of responsibility. Thus, a key element to accountability is the notion of answerability, which focuses on liability for appropriate sanctions and directs attention to rules, obligations and duties and their enforcement. This attributional perspective had strong parallels with current justice approaches, noted by Hamilton and Sanders (1992), providing further evidence for the use of attributional constructs in the accountability process. Attribution theory has been used to explain many aspects of jury decision-making in consumer product and accident litigation (Resnick, 2000).

The process of accountability therefore included the effect of accounts, which may act to either reduce or increase company responsibility. It is contended that accountability is a separate construct to a judgment of responsibility, and attributions of intentionality or foreseeability. Accountability, identified in law, therefore refers to being held accountable by an audience for your actions and, in a company crisis, therefore liable for sanctions in the form of fines and compensation payouts. To my knowledge, this construct has never before been applied to studies of company crises. Like intentionality, foreseeability, and responsibility, accountability is predicted to impact consumer reactions of emotions, behaviour and attitude, with accounts reducing the judgment of accountability.

Consumer Harm and Injury

In this section, it will be argued that severity of harm and injury impacts consumer outcomes.
In our system of justice, the harshness of the punishment relates to the amount of harm done (Weiner, 1995b). Hamilton and Sanders (1992) found that more serious consequences were associated with greater responsibility. Additionally, consumer researchers found severity of injury affects the placement of blame (Tedeschi & Nesler, 1993) and responsibility (Kelly & Campbell, 1997). Those who cause severe injuries are held more responsible than those who cause mild injuries (Kelly & Campbell, 1997).

In a company crisis study using plane crash scenarios, Kaman Lee (2004) investigated two levels of crisis severity (severe with 200 injured, 100 seriously, and extremely severe, with 300 dead) finding severity had no significant difference in consumer outcomes (sympathy, trust, responsibility and impression of the organisation). In contrast were studies by Mowen (1980) and Mowen and Ellis (1981). Mowen and Ellis (1981) found that degree of injury (minor burns versus two deaths) from use of a faulty coffee pot significantly influenced subjects’ perceptions of the company and their purchase intent regarding buying a new coffee pot from the company. Mowen and Ellis’ (1981) manipulation of the number of injuries (12 burns versus 1,250 burns) due to a faulty coffee pot and a children’s toy (2 versus 162 choking injuries) negatively influenced consumer impressions of the company. Companies in the high injury condition were seen less favourably, and perceived as less consumeristic (Mowen & Ellis, 1981). Thus it is contended that, in any manipulation involving injuries, the greater the number of injuries and the more severe, the greater will be the negative impact on consumer reactions.

Product Usage

Amount of product usage may also impact consumer reactions. In a negative publicity scenario where a particular brand of beer caused illness, Weinberger (1986) found that heavy product users (those expected to have a high level of involvement) had the least negative purchase intentions, with light users the most affected. That is, it appeared that heavy product users were more likely to discount or disbelieve negative publicity related to a product causing illness. While testing this construct is outside the scope of this thesis, product usage level should be considered when testing any crisis scenario.

Variables Predicted to Impact Other Variables

Other factors have also been found to impact emotions and/or behaviours and/or attributions. These are demographic factors of age, gender, culture, education and income level. In this section, their impact will be discussed and the argument made that, in any manipulation, these variables should be measured and their impact determined.
Both education and income levels of consumers have been found to impact crisis outcome. Weinberger and Romeo’s (1989) case studies on Tylenol painkillers tainted with cyanide, and Procter and Gamble’s toxic shock scare with their Rely tampon indicated that demographic factors played a role in the crisis outcome. The largest initial short-term usage impact during the toxic shock scare was on high-school graduates (rather than those with higher education levels), with a similar decline in lower income groups, while the usage decrease was strong in non-white/non-black racial groups (Weinberger & Romeo, 1989). The decline remained constant for lower income groups five years later (Weinberger & Romeo, 1989). In the Tylenol crisis, less educated groups were more influenced immediately following the crisis than were college graduates (Weinberger & Romeo, 1989). Three years later, sales to the less-educated groups (graduated high school or lower) were still below the pre-crisis level, despite recovery of lost market share in all other groups (Weinberger & Romeo, 1989). From these findings, it is predicted that the lower the consumer’s education and income, the higher the negative emotions and behavioural intents. As a result, education and income details need to be collected when testing any crisis scenario.

Age

Age has been found to impact emotional response. A study by Knight, Ross, Collins, and Parmentier (1985) found that the tendency to respond with anger to frustrating situations (measured using the Subjective Anger Scale) generally steadily declined with age for both men and women. A small but significant decline in anger response levels for both men and women was found with large age differentials, indicating that respondents in older age groups may respond with less anger following a negative event compared to those in younger age groups (Knight et al., 1985). As I predicted that emotion impacts behaviour, as large proportions of certain age groups (particularly older and younger), could skew results, age should be measured and its effects examined when testing a crisis scenario.

Gender

Researchers have noted some gender differences in emotional reactions. While most reports conclude that there is little evidence for gender differences in anger (e.g., Averill 1982, Tavris 1982), a number of studies yielded results. Knight et al. (1985) found that women scored consistently more highly than did men on anger across all age ranges, although the difference was not large. Averill (1982) found that while women and men had a similar pattern of frequency of anger, anger intensity was significantly higher for women. Therefore,
in a company crisis, if a product or service was involved in which women were the predominant buyers, this gender difference may influence emotional reactions.

Additionally, emotional expression may vary. Brody’s (1996) summary of studies by Cramer (1991), Fabes and Eisenberg (1991), Strayer (1986), Whitesell, Robinson, and Harter (1991) concluded that males and females express anger differently. Women used strategies such as avoidance, interpersonal reconciliation, turning against the self and non-aggressive strategies, while men used more direct, acting-out or retaliatory strategies such as hitting (Brody, 1996). Gender differences in emotional expression were also noted by Kassinove, Sukhodolsky, and Tsysarev (1997), who found that women were more likely to express anger though yelling and arguing, making sarcastic remarks and complaining, while Timmers, Fischer, and Manstead (1998) found that women tended to use more sad words, while men used aggressive language. Thus differences in emotional expression may translate into differences in behaviour following a crisis. For example, women may be more likely to use an avoidance strategy, withdrawing from product sales or complaining. Therefore gender was measured due to its potential impact on both emotions and behaviour.

Culture

Culture was examined because it is generally considered to impact cognitions, affect and behaviour. Culture has been defined in many ways. The social science literature, both in anthropology and psychology, contains many examples of cross-cultural dimensions for characterising culture, of which the most cited is individualism and collectivism. Individualism-collectivism (IC) appears to be the most important worldview that differentiates cultures (Triandis, 1994; Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997) and is the most central theme in cross-cultural research (Aaker & Maheswaran, 1997). Research on this dimension is large and robust.

In a highly individualist society, there is self-orientation, a belief in individual decisions, that values should apply to all, and a society where everyone is expected to take care of themselves and their immediate family (Hofstede, 1980). Members of individualist cultures (e.g., Australia, the United States, Canada) view the needs and goals of the self as most important. They exhibit behaviours that emphasise separateness and believe that the individual is an autonomous entity that has social behaviours that are independent of, and emotionally detached from, the collective. Individuals who view the self as independent and autonomous are called idiocentric (Triandis, Bontempo, Villareal, Asia, & Lucca, 1988.)
In contrast, collectivism assumes that maintaining the group’s wellbeing is the best guarantee for the individual. Members of collective cultures tend to emphasise interdependent collective views, needs and goals, display behaviour that is a function of norms and duties imposed by the collective, and have shared beliefs and social behaviours that are cooperative towards in-group members (Triandis et al., 1988). In this interdependent view that is characteristic of countries like China, Korea, South-east Asia and much of South America and Africa, the self is interdependent within the surrounding social context and the self, in relation to others, is the focus of individual experience (Markus & Kitayama, 1991).

Whereas individualists focus on self-concepts that are autonomous from groups, in contrast, collectivists define themselves as part of a group (Markus & Kitayama, 1991). Individualists have personal goals that may or may not overlap with the goals of their in-groups and consider it obvious that personal goals should have priority over group goals; collectivists have personal goals that overlap with the goals of their in-groups, and consider it obvious that one should subordinate personal goals to group goals (Triandis et al., 1988). Social behaviours of individualists are governed by individual attitudes, preferences and interests, while social behaviours of collectivists are governed by social norms, duties and obligations (Bontempo & Rivero, 1992; Miller, 1984). Finally, collectivists value relationships and harmony, even if the cost of doing so exceeds individual benefits.

*Culture affects emotions.*

Cross-cultural studies have indicated differences in emotional expression. Argyle (1986) suggested that rules restraining the social expression of anger and distress were more strongly endorsed in Japan and Hong Kong, which scored higher on collectivism, than in Italy or Britain, which scored higher on individualism. Because of the Japanese culture’s emphasis on group functioning and in-group harmony, emotions that threaten group cohesion are discouraged (Matsumoto, 1996). This is consistent with the findings of Gudykunst, Ting-Toomey, and Chua (1988), who suggested that both verbal and non-verbal reactions to experienced emotions were significantly stronger in cultures that were high on individualism.

While data from a study using American and Japanese undergraduates by Matsumoto, Kudoh, Scherer, and Wallbott (1988) suggested that the evaluation of, and reactions to, emotion antecedents are universal, the study found that Americans reported more intense emotions than did Japanese (Matsumoto et al., 1988). Generally, Japanese are held to be collectivist and Americans individualists (Matsumoto et al., 1997). Thus those from individualist cultures are expected to report more intense emotions than those from
collectivist cultures. American respondents also reported experiencing their emotions for longer than did Japanese, with more bodily symptoms and more expressive reactions (Matsumoto et al., 1988). From this, it can be inferred that culture influences experience and expression of emotion.

**Culture affects behaviour.**

When asked what they would do to cope with the consequences of various emotional events inducing anger, fear, disgust, shame and guilt, more Japanese reported that no action was necessary than did American respondents (Matsumoto et al., 1988). This suggested that collectivists were less prone to act on their feelings, while individualists were more likely to act on their feelings. Thus an assumption is made that culture may impact consumer behaviour, such as purchase intentions.

**Culture affects attributions.**

While the emotional events that elicit emotions, and the significance of emotions, may differ appreciably from one culture to another, the elements of appraisal appear to be highly similar (Ellsworth, 1994). Triandis (1989) believed that the individualistic separation of the self from the in-group is necessary for allocation of personal responsibility (in Al-Zahrani & Kaplowitz, 1993).

Predisposition to a particular attribution style is evident in some cultures. With the emphasis in some collectivist cultures on maintaining group harmony, there is a tendency when assessing others’ situations for attributions to be more external than internal (Lee, Hallahan, & Herzog, 1996). Thus people from Western (i.e., individualist) cultures generally favour internal attributions while those from Eastern (i.e., collectivist) cultures generally favour external or situational attributions (Lee et al., 1996). In a study involving situations of morality and achievement, Americans were slightly more inclined to internal or dispositional attributions than the more collectivist Saudis (Al-Zahrani & Kaplowitz, 1993).

It is suggested that these findings are in line with Singelis, Triandis, Bhawuk, and Gelfand’s (1995) conceptualisation of individualism-collectivism, and that individualists are more inclined to internal attributions, with collectivists more prone to give situational, or external, attributions. Perceptions of controllability may also be culturally influenced. Rodrigues (1981) observed that Brazilian respondents rewarded effort (a controllable cause) less, and ability (an uncontrollable cause) more than did American respondents (in Betancourt, Hardin, & Manzi, 1992). In case of failure, they punished lack of ability (uncontrollable) more, and lack of effort (controllable) less, than did American respondents.
(Betancourt et al., 1992). Thus, collectivists may be less punitive in regards to controllable causes and be more likely to make external attributions than do individualists.

**Culture summary.**

The argument was made that culture impacted on the experience of emotion, including expression and experience of emotion, behaviour, as well as on attributions, with differences in whether external or internal attributions are likely to be made. It is therefore recommended that cultural factors be measured in any manipulation involving attributions, emotion and behaviour and that impact of culture on these variables should be tested.

Summary of this Chapter

The recurrence of organisational crises, the likelihood that they will receive high levels of media attention, and the seriousness of their impact on consumers, suggests the need for continuing research on how consumers respond to companies in crisis (Jorgensen, 1996).

Despite the fact that accounts may be the one tool that managers possess at the time of the crisis outbreak to reduce the negative impact on consumer reactions, research on use of organisational account strategies is extremely scarce. Research to date has left a number of questions unanswered, including the effects of a full range of company accounts on how consumers think, feel and act towards the company affected.

I reviewed studies examining the processes intervening between accounts and purchase intentions, then attributions and behavioural intentions, and finally, between accounts, attributions and behavioural intentions, arguing that, as emotion was the immediate precursor to negative behavioural intentions, emotions play a key role in explaining reaction to crises. Company crisis studies to date were limited by their application of Weiner’s (1986, 1995b) attributional theory (WAT), which placed its focus on attributions, rather than emotions, as the driver of behaviour in company crises. Yet studies found emotions were the immediate antecedent of behaviour. Additionally, WAT limited emotions to anger and sympathy, while it is evident that a wider range of emotions may result. In addition, although Weiner (1986, 1995b) cited the importance of personal relevance of a negative event, he did not include it in his model.
From this, I argued for the application of Weiss and Cropanzano’s (1996) Affective Events Theory (AET) to company crisis studies, and contended that, as its focus was on negative events determining primary and secondary consumer attributions, emotions, attitude and behaviour, AET provided a solid basis for a model to explain the process intervening between accounts and behavioural intentions. However, instead of AET’s primary appraisal of personal relevance, I argued instead for use of the better operationalised and more widely applied construct of involvement. Next, instead of AET’s goal-oriented secondary appraisal process, I argued for use of WAT. Congruent with AET, it was also contended that negative affectivity and mood may impact this process. In my application of AET, I developed a model explaining how a company’s account of its role in a crisis impacted responsibility, intentionality, foreseeability and accountability to determine consumers’ emotions, behaviour and attitude. Very little attention had been directed to research on emotions during company failures and the behaviours that result. Indeed, no company crisis study has even examined the range of emotions and behaviours that crises elicit.

I next developed a crisis typology based on the causal conditions of the crisis and contended, in line with AET, that such a negative event would impact the primary appraisal process (involvement), secondary appraisal process (attributions), as well as emotions, behaviour and attitude. I also contended that crisis impacts judgments of responsibility and accountability and attributions of intentionality and foreseeability. In addition, I contended that the best choice of company account was dependent upon these crisis causal conditions. From this, I created a decision tree to guide managerial selection of account to suit crisis type, based on Weiner’s (1995b) responsibility process.

When examining other factors that may influence consumer reactions, I argued that a number of factors should be controlled for, specifically, reputation and injury levels, and that demographic variables of age, gender, culture, education and income should be examined for their impact on consumer reactions of emotions and/or behaviour and/or attitude.
The main elements of the model are shown in Figure 8. This model is designed to demonstrate the main constructs viewed as impacting other constructs, reflecting the processes involved. It is not intended to be tested as a structural equation model.

Figure 8 The final model
Hypotheses Arising from this Review

Hypothesis 1: Accounts and Crisis type (interaction effect) Impact on Emotions, Behaviour, Attitude, Responsibility, Accountability and Attributions of Foreseeability and Intentionality.

Different Accounts will be perceived as more effective, dependent upon the perceived origins of the different hypothetical Crisis types, resulting in less negative, or more positive consumer emotions, less negative or more positive behavioural intentions, and less negative or more positive attitudes to the company, and higher or lower judgments of responsibility, accountability, foreseeability and intentionality. Specifically:

(a) In a hypothetical crisis perceived to be internal and controllable, “confession”, followed by “justification” will result in less negative reported emotions, behaviours and attitudes, and lower attributions of responsibility, accountability, foreseeability and intentionality.

(b) In a hypothetical crisis perceived to be internal and uncontrollable, “excuse” will result in less negative reported emotions, behaviours and attitudes, and attributions of lower responsibility, accountability, foreseeability and intentionality.

(c) In a hypothetical crisis perceived to be internal and ambiguous, “confession”, will result in less negative reported emotions, behaviours and attitudes, and attributions of lower responsibility, accountability, foreseeability and intentionality.

(d) In a hypothetical crisis perceived to be external and controllable, “excuse” will result in less negative reported emotions, behaviours and attitudes and attributions of lower responsibility, accountability, foreseeability and intentionality.

(e) In a hypothetical crisis perceived to be external and uncontrollable, “denial” will result in less negative reported emotions, behaviours and attitudes and attributions of lower responsibility, accountability, foreseeability and intentionality.

(f) In a hypothetical crisis perceived to be external and ambiguous, “confession” will result in less negative reported emotions, behaviours and attitudes and attributions of lower responsibility, accountability, foreseeability and intentionality.
**Hypothesis 2: Accounts Impacting Emotions (main effect)**

The lower the level of Account in the proposed account hierarchy, the higher will be the negative reported emotion. Specifically:

(a) Accounts of “no comment” and “denial” given in regards to a hypothetical crisis will result in the highest levels of reported negative consumer emotions and the lowest levels of positive emotions towards the company and the service.

(b) Accounts of “excuse” and “justification” given in regards to a hypothetical crisis will result in moderate levels of reported positive and negative emotions towards the company and the service.

(c) The account of “confession” given in regards to a hypothetical crisis will result in the lowest level of reported negative emotions and the highest level of positive emotions toward the company and the service.

**Hypothesis 3: Accounts Impacting Behavioural intention (main effect)**

The lower the level of Account in the proposed account hierarchy, the higher will be the negative reported behavioural intentions. Specifically:

(a) Accounts of “no comment” and “denial” will result in the highest level of reported negative behavioural intentions and the lowest level of reported positive behavioural intentions towards the company and the service.

(b) Accounts of “excuse” and “justification” will result in moderate levels of reported negative behavioural intentions and moderate levels of reported positive behavioural intentions towards the company and the service.

(c) The Account of “confession” will result in the lowest level of reported negative behavioural intentions and the highest level of positive behavioural intentions towards the company and the service.

**Hypothesis 4: Accounts Impacting Attitude (main effect)**

The lower the level of Account in the proposed account hierarchy, the lower will be the reported level of attitude. Specifically:

(a) Accounts of “no comment” and “denial” will result in the lowest level of reported positive attitude towards the company and the service.

(b) Accounts of “excuse” and “justification” will result in moderate levels of reported positive attitude towards the company and the service.

(c) The Account of “confession” will result in the highest level of reported positive attitude towards the company and the service.
Hypothesis 5: Account and Attributions of Foreseeability and Intentionality and Judgments of Responsibility and Accountability

(a) Accounts of “no comment” and “denial” will result in the highest level of reported foreseeability, intentionality, responsibility and accountability.
(b) Accounts of “excuse” and “justification” will result in moderate levels of reported foreseeability, intentionality, responsibility and accountability.
(c) The Account of “confession” will result in the lowest level of reported foreseeability, intentionality, responsibility and accountability.

Hypothesis 6: Crisis types Impacting Emotions (a main effect)

A hypothetical crisis event will result in reporting of either negative or positive emotions towards the company. Specifically,

(a) The more internal and the more controllable the perceived origins of a hypothetical crisis, the higher will be the reported negative emotions and the lower will be the reported positive emotions.
(b) The more external and the more uncontrollable the perceived origins of a hypothetical crisis, the lower will be the reported negative emotions and the higher will be the reported positive emotions.
(c) Hypothetical crises with perceived ambiguous origins will result in the highest reported negative emotions and the lowest reported positive emotions of all conditions.

Hypothesis 7: Crisis types Impacting Behaviour (a main effect)

A hypothetical crisis event will result in reporting of negative behavioural intention. Specifically,

(a) The more internal and controllable the perceived origins of a hypothetical crisis, the higher will be the level of reported negative behavioural intentions towards the company and the lower will be the level of reported positive behavioural intentions.
(b) The more external and controllable the perceived origins of a hypothetical crisis, the lower will be the level of negative reported behavioural intentions and the higher will be the level of positive reported behavioural intentions.
(c) Hypothetical crises with perceived ambiguous origins will result in the highest reported negative behavioural intentions and the lowest reported positive behavioural intentions of all conditions.
Hypothesis 8: Crisis Type and Attitude
In a hypothetical crisis event, the more internal and controllable the crisis is perceived to be, the more negative will be the reported attitude toward the company.

Hypothesis 9: Crisis Type Impacting Involvement, Attributions, Responsibility, Accountability, Foreseeability and Intentionality (Main Effect And Interactions)
(a) The more internal the perceived origins of the hypothetical crisis, the higher will be the involvement, attributions of internality, foreseeability and intentionality and judgments of responsibility and accountability, and the attribution of internal locus.
(b) The more controllable the perceived origins of the hypothetical crisis, the higher will be the involvement, attributions of internality, foreseeability and intentionality and judgments of responsibility and accountability, and the attribution of controllability.
(c) The more external the perceived origins of the hypothetical crisis, the lower will be the involvement, attributions of internality, foreseeability and intentionality, and judgments of responsibility and accountability, and the higher the attribution of external locus.
(d) The more uncontrollable the perceived origins of the hypothetical crisis, the lower will be the involvement, attributions of internality, foreseeability and intentionality, and judgments of responsibility and accountability, and the lower the attribution of controllability.

Hypothesis 10: Attributions Impacting Emotions
(a) The stronger are attributions of internality and controllability in regards to the perceived origins of a hypothetical crisis, the stronger will be negative reported emotions and the weaker will be positive reported emotions.
(b) The stronger are attributions of externality and uncontrollability in regards to the perceived origins of a hypothetical crisis, the weaker will be negative reported emotions and the stronger will be positive reported emotions.

Hypothesis 11: Involvement Impacting Emotions
The higher the level of involvement with the hypothetical crisis, the higher the reported intensity of emotions.
**Hypothesis 12: Attributions of Responsibility, Foreseeability, Intentionality and Accountability Impacting Emotion**

In a hypothetical crisis, stronger reported negative emotions and weaker positive emotions will be associated with higher:

(a) responsibility  
(b) foreseeability  
(c) intentionality  
(d) accountability

**Hypothesis 13: Attributions Impacting Behaviour**

(a) The stronger the attributions of internality and controllability in regards to the perceived origins of a hypothetical crisis, the stronger will be negative reported behavioural intentions and the lower will be positive reported behavioural intentions.  
(b) The stronger the attributions of externality and uncontrollability in regards to the perceived origins of a hypothetical crisis, the weaker will be negative reported behavioural intentions and the higher will be positive reported behavioural intentions.

**Hypothesis 14: Emotions Impacting Behavioural Intent**

Negative reported emotions will result in negative behavioural intention. Conversely, positive reported emotions will result in less negative behavioural intent. Specifically:

(a) The more negative the reported emotions in a hypothetical crisis, the more negative will be the behavioural intentions.  
(b) The more positive the reported emotions in a hypothetical crisis, the more positive will be the behavioural intentions.

**Hypothesis 15: Attributions of Foreseeability, Intentionality and Judgments of Responsibility and Accountability Impacting Behaviour**

In a hypothetical crisis, stronger reported negative behavioural intentions and weaker reported positive behavioural intentions will be associated with higher:

(a) responsibility  
(b) foreseeability  
(c) intentionality  
(d) accountability
**Hypothesis 16: Attitude Impacting Behaviour**

In a hypothetical crisis, the lower is the reported attitude, the lower the reported positive behavioural intentions, and the higher the reported negative behavioural intentions.

**Hypothesis 17: Demographic Factors Impacting Emotions, Behavioural Intentions or Attributions**

In a hypothetical crisis:

(a) The lower the consumer’s income, the higher will be the level of reported negative emotions, and reported negative behavioural intentions.

(b) The younger the participant, the higher will be reported negative emotions, and reported negative behavioural intentions, while the older the participant, the higher will be reported positive emotions and reported positive behavioural intentions.

(c) The lower the consumer’s level of education, the higher will be the level of reported negative emotions, and reported negative behavioural intentions.

(d) Compared with men, women will report both more negative emotions, and negative behavioural intentions.

(e) Respondents belonging to an individualist cultural background will be more likely to report stronger attributions of controllability regarding the crisis origin than respondents belonging to a collectivist cultural background. Respondents belonging to a collectivist cultural background will be more likely to report external attributions regarding the crisis origin, while respondents belonging to an individualist cultural background will be more like to make internal attributions.

(f) Respondents belonging to the collectivist culture will report lower negative emotions than those belonging to individualist cultures.

(g) Respondents belonging to the collectivist culture will report lower negative behavioural intentions, than those belonging to individualist cultures.

(h) Respondents scoring high in Negative Affectivity (NA) will report more negative emotions, than will respondents scoring low in NA; Respondents scoring high in Positive Affectivity (PA) will report more positive emotions than will respondents scoring low in PA.

(i) Respondents scoring high on negative mood will report stronger negative emotions than will respondents scoring high on positive mood.

(j) Respondents scoring high on negative mood will be more likely to report internal locus attributions and internally controllable attributions regarding the crisis origin and will be less likely to report externally controllable attributions than those scoring high on positive mood.
Hypothesis 18: Emotions Impacting Attitude

There more negative the reported emotions in a hypothetical crisis, the more negative will be the attitude towards the company.
In this chapter, I justify the research design first from an epistemological stance, then from a methodological viewpoint, and outline the research design. An explanation for using different methodologies in the research design, and outlines of the three studies are given. As the literature revealed a paucity of information about emotions, attitude and behaviours evoked by company crises, Study 1 was an exploratory study using focus group research to investigate emotions, behaviours, attitudes and other factors that consumers consider important in company crises. Study 2 used a quasi-experimental factorial design and a student sample randomly allocated to groups in order to check that operationalisations of constructs were correct, to test and adjust measuring instruments and to check the success of manipulations. Study 3 was a large-scale factorial experimental design using a general population sample, randomly allocated to groups to investigate the full effects of the independent variables on the dependent variables. In this section, I present an argument for the methods used to achieve validity and reliability in the qualitative and quantitative studies. Finally, I provide a brief account of ethical matters.

Justification for the Epistemology: The Scientific Realism Paradigm

Ontology is defined as the study of existence or being and the establishment of reality (Crotty, 1998). In this research I used an objective epistemology following scientific realism. Historically, scientific methodology has held the possibility of escaping local perspective and discovering universal truth (Ward, 1997). This approach required a sustained scepticism, an enduring disbelief of received opinion until convinced by the empirical and logical power of the evidence or the experiment (Ward, 1997). Scientific realism proposed, first, that the world exists independently of its being perceived (classical realism); second, that the job of science is to develop genuine knowledge about the world, even though this knowledge will never be known with certainty (fallibilistic realism); and third, that all knowledge claims must be critically evaluated and tested to determine the extent to which they do, or do not, truly represent or correspond to that world (critical realism) (Hunt, 1991). The fourth tenet of scientific realism is that inductive realism aids in establishing the truth through long-term success of knowledge claims (inductive realism).
Epistemologically, scientific realism meets the needs of the present research. Scientific realism is flexible in that it allows for theory testing and theory building (Miles & Huberman, 1994). As prescribed by scientific realism, the outputs from a model are appropriate for scientific inquiry, as the investigator proceeds to explain the model and its functioning (Zinkhan & Hirschheim, 1992). The model represents only what we know of the world, and such knowledge is inherently flawed. As we build successive models, however, we may improve representation (Zinkhan & Hirschheim, 1992). Scientific realism is open to all techniques and procedures that honestly adopt the pursuit of truth as an objective (Hunt, 1991). It provides an approach to causation that is very effective in describing marketing phenomena that act as enabling or inhibiting agents, rather than as primary causes (Zinkhan & Hirschheim, 1992).

Some limitations of this positivist paradigm include the argument by Berger and Luckmann (1967) that what we perceive as objective reality is subjectively constructed (in Zinkhan & Hirschheim, 1992). Additionally, the stance of inductive realism cannot hold because it is increasingly difficult to discover generalisations and truths that remain stable over time, particularly where consumers are concerned (Zinkhan & Hirschheim, 1992). For example, a marketing study of housewives in the 1950s and in the 1990s would not be expected to yield similar results (Zinkhan & Hirschheim, 1992). As marketing truths may not remain constant across cultures (Zinkhan & Hirschheim, 1992), critical realism may not address how results change in different cultural contexts.

Research Design

According to Miles and Huberman (1984), researchers can triangulate through use of different data sources (population samples), data type (qualitative and quantitative), and specific methods (e.g., focus groups and experimental surveys). In order to gain convergent validity in this research design, I used triangulation in these three ways.

While between-method triangulation addressed issues related to external validity and provided evidence of cross-validation (Jick, 1979), combining different methods within a single piece of research raised questions about movement between paradigms at the levels of epistemology and theory (Brannen, 1992). Quantitative methods are associated with positivist epistemology, while qualitative methods are associated with an interpretative epistemology aimed at uncovering meaning (Brannen, 1992). Denzin (1970) saw the combing of research
strategies as a means of examining the same research problem and hence enhancing validity, focusing on integrating the data, instead of seeing it as complementary (in Brannen, 1992). A further theoretical justification for combining qualitative and quantitative approaches is to view the different theoretical frameworks as different levels of inquiry of the micro/macro dimension, which cannot be addressed through the same method (Brannen, 1992). In contrast, Burgess (1984) made the argument that researchers ought to be flexible and select a range of methods appropriate to the research problem under investigation (Brannen, 1992). That is, research problems should be matched with methods, not research methods to problems (Brannen, 1992). The combination of both approaches allowed for elicitation of unexpected data in the qualitative research, and increased generalisability through quantitative research (Jick, 1979). This multi-method approach demands that the researcher specifies the particular aims of each method, the nature of the data that are expected, and how the data relate to theory (Brannen, 1992).

The research design illustrated in Figure 9 consisted of six stages: first, an extensive literature review; second, development of a theoretical framework applying aspects of Weiss and Cropanzano’s (1996) seminal Affective Events Theory; third, Study 1 - a qualitative study to fill in gaps in the theoretical framework; fourth, this was followed by an assessment of any necessary adjustments to the theoretical framework to fit unexpected data; fifth, Study 2 - a quantitative study to test the main constructs and the questionnaire; and sixth, Study 3 - a qualitative study testing the full hypotheses.

Figure 9 The research design
Research Objectives

Despite crises’ major negative impact on companies, in part due to negative reactions from current or potential consumers of the product or service, there is little research on consumers’ reactions to crises. No research has investigated – from a consumer’s perspective – the range of thoughts, feelings and actions consumers have in response to a product or service crisis. This creates a problem for firms, both in their understanding of how and why consumers react to a crisis, and in their management of the crisis to reduce negative consumer outcomes. Therefore, one main research objective was to examine the range of consumer emotions, attitudes and behaviours that crises elicit in consumers.

In addition, while the company’s communicated account of its role in the crisis may be the only tool under company control to influence consumer reactions to the crisis, no crisis research has examined the impact of all five commonly used accounts on consumer reactions. Therefore, another main research objective was to assess the impact of company accounts on consumers’ emotions, behaviour and attitudes as well as on their attributions (including foreseeability and intentionality), involvement, and judgments of accountability and responsibility following different types of organisational crises.

While three crisis types (internal controllable, external uncontrollable, ambiguous) have been empirically examined for their effect on a small range of consumer impacts, the effect of a range of crisis types and accounts on a broad spectrum of emotions and behaviours has not been examined. In addition, the differential impact of each of the crisis types (Locus and Controllability) has also not been examined. Therefore, a main research objective was to examine the main and interaction effects of different crisis types and accounts on consumer attributions, emotions, behaviour, and attitude.

Other research objectives were to examine the role that consumer involvement, attributions (including intentionality and foreseeability), responsibility and accountability played in a crisis, and the impact of mood and Negative and Positive Affectivity (NA/PA) on consumer reactions. Demographic variables (age, gender, culture, income, education) were controlled and checked for effects. In addition, a number of variables were predicted to impact other dependent variables, and these were tested.
Study 1 was designed to answer specific research questions, Study 2 mainly provided testing of constructs, instruments and scenarios, while Study 3 tested the hypotheses developed from the literature review.

**Study 1: Focus Groups**

As noted in the literature review, the small amount of literature on consumer reactions to crises and product/service failure has focused on attributions, not emotions or behaviour.

No crisis research was identified that examined emotions, other than anger and sympathy, or behaviour apart from purchase intent, investment intent and, for product/service failure, complaint intent. Thus the possible range of emotions, and their valence, and the full range of behaviours that consumers exhibit in response to a crisis was not known. Indeed, anecdotal evidence suggested that some crises may evoke positive emotions and behaviours towards the company, such as Arnott’s biscuit tampering by an extortionist, although, to my knowledge, no positive reactions apart from sympathy have previously been investigated. Additionally, while researchers empirically tested a range of factors in product recall studies (e.g., media attention, familiarity of company name), no identified study examined the factors that consumers themselves considered important in determining crisis outcome. Therefore this first study was concerned with uncovering likely thoughts, feelings and behaviours recalled by consumers towards a company or its products following a crisis, to identify major variables not previously considered. As a result, data were gathered using the qualitative focus group method. Study 1, being exploratory, had research questions rather than hypotheses:

- What emotions, behaviours and attitudes do various crisis types evoke?
- What other factors do consumers consider important in a crisis?

Additionally, in order to test the hypotheses presented in chapter 2, Study 1 provided the data for development of new taxonomies for crisis emotions and behaviour.
Focus groups can be used for three purposes: phenomenological - to discover consumers’ shared everyday life experiences, such as their thoughts, feelings and behaviour; exploratory - to generate, develop and screen ideas or concepts; and clinical - to uncover consumers’ underlying feelings, attitudes, beliefs and opinions, including subconscious behaviour causes (Calder, 1977). Focus groups were chosen for exploratory and clinical purposes. They are ideal for exploring people’s experiences, opinions, wishes and concerns (Kitzinger & Barbour, 1999) and can tell a researcher how people say they will or did behave (Morgan, 1998). This method promotes group interaction and facilitates open and spontaneous responses from participants, and so can provide richer information than that obtained by individual interviews (Kelly & Groff, 2000). Focus groups can help develop an understanding of key issues, and can be used to help construct questionnaires (Kitzinger & Barbour, 1999).

Morgan (1998) described an approach to analysing focus group data. While there is the purely qualitative approach, which uses an ethnographic summary, there is also a more quantitative approach using systematic coding via content analysis (Morgan, 1998). This approach involves systematically tallying key topics to identify and develop important themes. This approach was used. Additionally, as Carpenter and Halberstadt (1996) warned against imposing psychological classifications of emotions upon laypersons and proposed the adoption of a layperson’s classifications, the focus groups were used to elicit commonly used terms describing various emotions following crises, which were incorporated into the emotion lexicon used in studies 2 and 3. The focus groups also identified typical behaviour for incorporation into scales for studies 2 and 3.

Because focus groups are conducted informally without the stringencies imposed by traditional quantitative methods, results must be interpreted differently as general ideas and themes that emerge from discussions (Kelly & Groff, 2000). Data are context bound and less generalisable than in the case of quantitative methods (Kitzinger & Barbour, 1999).

Study 2- Pilot Study

There were several reasons for conducting Study 2. Following Study 1, vignettes were developed for testing. These were in the form of newspaper stories, operationalising each different crisis cause and each company account. Pre-testing the scenario in a pilot study allowed for both scenario and questionnaire refinement prior to Study 3. Thus, one purpose
was to investigate whether the independent variables, Crisis types and Accounts, were successfully operationalised by testing them against the combined dependent variables. That is, the purpose was to examine whether the six crisis types (internal/controllable, internal/ambiguous, internal/uncontrollable, external/controllable, external/ambiguous and external/uncontrollable) and the five company accounts (no comment, denial, excuse, justification, confession) delivered via different news stories were perceived as intended. Thus the primary research question for this study was:

Do Crisis types and company Accounts differentially interact with the dependent variables?

A questionnaire was developed to measure each of the dependent variables hypothesised - primary appraisal (involvement), secondary appraisal (attributions), intentionality, foreseeability, accountability, responsibility, emotions, behaviour and attitude, as well as the endogenous variables of mood and negative affect, and the demographic variables (age, gender, education, income, culture) that were controlled. Thus the second purpose of the pilot was to test the questionnaire scales in order to ensure that the constructs were appropriately operationalised, and to adjust and shorten scales where necessary.

Next, a factorial quasi-experimental design was used to test a main effect of the independent variables – the Crisis type of locus (internal/external) and controllability (controllable/ambiguous/uncontrollable), and five Accounts - against combined dependent variables using a convenience sample of students randomly assigned to a treatment. Thus this was a 2 x 3 x 5 between subjects design yielding 30 combinations of treatments. This then allowed me to ascertain which constructs were superfluous to the experiment design, allowed refinement of hypotheses, and identified a new independent variable for testing, Harm level.

In sum, Study 2 ensured that the independent variables were correctly operationalised in the news stories, refined the questionnaire scales, developed new manipulation checks, eliminated superfluous constructs (foreseeability, intentionality, mood and negative affectivity), created adjustments to the hypotheses (the ambiguous crisis type failed to have an impact), created a new Harm level hypothesis, and produced a robust questionnaire for testing in Study 3. The pilot (pre-test) is a mandatory part of developing a questionnaire (Oppenheim, 1992).
This study tested the hypotheses using a factorial between-subjects experimental design using a randomly selected general population sample. The purpose of Study 3 was to test the effectiveness of the independent variables of Crisis type (reduced to internal/controllable, internal/uncontrollable, external/controllable, external/uncontrollable), company Account (no comment, denial, excuse, justification, confession) and Harm (high/low) against the hypothesized dependent variables. The dependent variables remaining after Study 2 were involvement, attributions, responsibility, accountability, emotions, behavioural intentions, and attitude, as well as the demographic variables.

While this study tested hypotheses rather than research questions, one of the main purposes was to examine whether the Crisis type (internal or external, controllable or uncontrollable), company Account (no comment, denial, excuse, justification and confession) and Harm level (high/low) differentially interacted in regards to emotions, behavioural intentions and attitudes. Thus, this was a 2 x 2 x 5 x 2 factorial design yielding 40 treatment combinations. Additionally, this study indicated which company accounts were most effective in reducing negative impact on consumer emotions, behavioural intentions and attitudes.

The following questions were also answered by Study 3: Did the type of crisis event interact with the effectiveness of different accounts and harm level? Which company accounts were more effective in reducing negative impact on consumer emotions, behavioural intentions and attitudes than others? How do emotions impact behaviour and attitudes?

**Justification of the Methodology for Study 2 and Study 3**

An experimental design was selected for a number of reasons (although use of a convenience sample for Study 2 made this a quasi-experimental design). An experimental technique had the greatest potential for establishing cause and effect relationships between variables (Fromkin & Streufert, 1976). When a relationship between independent and dependent variables was sought, all other variables that might contaminate or confound the relationship must be controlled (Sekaran, 1992). Eliminating these uncontrolled and potentially confounding variables by use of an experiment reduces the number of potential alternative explanations (Marx, 1963), thus the effects of the independent variable on the dependent variable can be demonstrated (in Sekaran, 1992). A preferred experiment is one that reduces experimenter contact with participants and reduces evaluation apprehensions and experimenter cues that can produce biased responses (Fromkin & Streufert, 1976). Both studies used booklets with self-paced questionnaires as a data collection source. Additionally,
the random assignment of participants to different treatment groups disrupts any potential lawful relationship between participants and variables (Fromkin & Streufert, 1976).

As several levels of independent variables were tested, both Study 2 and Study 3 used a factorial between-subjects design, ensuring that participants saw only one combination of crisis type and company account. Factorial MANOVA was chosen as the method of analysis as the design used more than one IV and multiple DVs (Tabachnik & Fidell, 2001). This allowed for comparison among different treatment conditions, or cells, to examine whether the independent variables interacted on combined dependent variables or individual dependent variables (Tabachnik & Fidell, 2001). MANOVA asks whether a combination of the dependent variables varies as a function of treatment. In a factorial MANOVA, a different linear combination of DVs was formed for each main effect and interaction, maximising separation of treatment groups. By measuring several DVs, I improved the chance of discovering what it was that changed as a result of different treatments and their interactions.

Ethical Matters

Ethical approval for Study 1 was obtained through Monash University’s Standing Committee on Ethics in Research Involving Humans (SCERH), while ethical approval for Studies 2 and 3 were obtained from Griffith University’s Human Research Ethics Committee (HREC). All study participants were aged 18 years or over, were assured in writing both of the voluntary nature of any information offered and the confidentiality of all data collected, signed informed consent forms that they understood the procedure, and were offered small incentives congruent with each university’s ethics policy. Participants were debriefed following each study, verbally in Study 1, and in written form at the end of each questionnaire in Studies 2 and 3.

Conclusion

The research design in this thesis had four stages, encompassing the literature review, the exploratory qualitative study, a quantitative pilot study testing the operationalisation of the instruments with evaluation and adjustment of the model, and a quantitative study testing the full model.
As noted in the literature review, despite the fact that major crises cost companies many millions of dollars in lost sales, damaged reputation, and reduced market share annually, there is little research on consumers’ reactions to company crises. In fact, no research has investigated - from a consumer’s perspective - the range of thoughts, feelings and actions consumers have in response to a product or service crisis. This creates a problem for companies, both in their understanding of how and why consumers react to a crisis, and in their management of the crisis to reduce negative reactions from current and prospective consumers of products or services, and therefore minimise negative outcomes for the company. Specifically, no research was identified that indicated either the range of emotions (apart from anger and sympathy) or behaviours (apart from purchase intent, investment intent and, for product/service failure, complaint intent) that various crisis types may evoke from consumers. In addition, it was not known whether there were other major factors that consumers may consider important in a crisis. This chapter therefore covers the research questions and research design for the first study, which used a series of eight focus groups. I discuss the research design, including the sampling and data collection procedures. Next, I describe the three stages in the qualitative data analysis: data reduction, findings (including identification of new variables) and conclusions. Issues of reliability, validity and rigour are discussed, along with the limitations of this study. The next step in the research process is described.

Research Questions

This first study, being exploratory, had research questions rather than hypotheses:
Research question 1: What emotions, behaviour and attitudes do various crises evoke?
This can be broken down into several questions:
- What emotions do various crises evoke?
- What behaviours are elicited?
- Which emotions are associated with what types of consumer behavioural responses?
- What attitudes are elicited?
- Do different types of crises have different outcomes for consumers?
The second main objective of Study 1 was to check the feasibility of the theoretical framework and to investigate whether there existed any unconsidered important variables that may impact crisis outcome for consumers. Thus, a further question was asked: Research question 2: What other important crisis factors impact consumer reactions?

Research Design

To fill in these knowledge gaps, a series of eight focus groups totalling 52 participants was held in Melbourne, Australia, in mid-2001 and videotaped for analysis. Rather than wait opportunistically for a crisis to occur, I elected to investigate recalled crises, especially as Melbourne had, in recent times, suffered from a number of corporate crises.

Sample

The sampling frame chosen was the general population of Melbourne using non-probability sampling. Sampling was purposive, that is, the criterion for selecting participants depended on the objectives of the study and research questions. Statistical representativeness is not the aim of most focus group research issues, but instead qualitative sampling was used to encompass diversity and to compose a structure (Kitzinger & Barbour, 1999).

As the literature indicated that age, income, education, culture and gender could influence emotional and behavioural reactions, participants were allocated to groups matched on high or low dimensions of age, income, education and culture (individualists/collectivists), with each group containing a gender mix. This totalled eight focus groups. To determine culture, participants were asked to identify the main culture (e.g., English, Vietnamese) they saw themselves as belonging to, then were classed as either individualist or collectivist using Hofstede’s (2001) country classification (see Appendix 4.7.2).

Focus groups ideally should comprise between six and ten individuals (Lunt, 1996; Zikmund, 1997). Groups that are too large may not permit adequate participation of group members, while in groups that are too small, one or two members may intimidate others (Zikmund, 1997). As “no shows” generally constitute about 20% of the group (Greenbaum, 1998), I over-recruited for each group, aiming for a final sample of seven participants attending per group, that is, 56 volunteers. Fifteen volunteers were unable to attend at the time allocated and were dropped from the study. Actual group size ranged from four to eight, with an average group size of seven with a total of 52 participants. Lowest attendance (four) was in
the lower age group, which had four “no shows.” Due to the low level of remuneration ($25 travelling fee), it was assumed that an interest in, or an experience with, a company crisis was the motivator for participation, rather than financial gain. Heterogeneous groups brought together on the basis of a shared experience are often the most productive (Kitzinger & Barbour, 1999).

Recruitment

Focus group participants were recruited through media stories generated in local newspapers, media interviews, and a listing on a government employment site (Centrelink). Three weeks prior to group sessions, media releases and announcements (see Appendices 4.1, 4.2 and 4.3) calling for volunteers were faxed to newspapers (both metropolitan and local), TV and radio stations, with some publicity received in all media. The media releases focused the call for volunteers either on consumers who had an interest in company crises, or on those who wanted to voice their feelings about company crises, with crisis examples provided in the media releases.

Interested respondents were requested to phone for more information and, for consistency, were given details from a verbal information sheet (see Appendix 4.4), then posted an explanatory statement on university letterhead (see Appendix 4.5), plus a consent form (see Appendix 4.6), a stamped addressed envelope for reply, and a screening questionnaire asking for voluntary response to demographic questions (see Appendix 4.7.1).

As “Informed Consent Forms” were received, participants were allocated (based on questionnaire responses) to focus groups and were telephoned to confirm participation time. As the date for the start of the focus groups grew closer, extra recruitment methods in the form of posters at the university and in a local school, and word-of-mouth contacts were used. Follow-up phone reminders to those attending helped to maximise attendance at the focus groups.

The groups were not especially homogenous, apart from the lower age group, which were mainly students. Focus group 1 (FG1) was higher age ($n = 6$), Focus Group 2 (FG2) higher education ($n = 8$), Focus Group 3 (FG3) higher income ($n = 6$), Focus Group 4 (FG4) lower income ($n = 8$), Focus Group 5 (FG5) lower age ($n = 5$), Focus Group 6 (FG6) lower education ($n = 7$), Focus Group 7 (FG7) individualists ($n = 8$) and Focus Group 8 (FG8) collectivists ($n = 4$).
Data Collection Procedures

The Setting

While people are more likely to turn up in a familiar venue (Barbour & Kitzinger, 1999), the focus groups were held in a small modern conference room at Monash University’s Caulfield campus, the campus located closest to Melbourne’s city centre. The university setting was used to lend credibility to the non-commercial nature of the research purpose in the call for volunteers. The room was selected for its comfort, based on its relative noise proofing, even temperature (air-conditioned) and comfortable size and seating. Participants sat around a large table. An audiocassette player was placed on the table and a videotape recorder was positioned in view of all participants. There was a whiteboard for moderator use.

Name tags, with participants’ first names only (for confidentiality) were provided to enhance the social setting. Food and drinks were served beforehand (as recommended by Greenbaum, 1998) and left for self-serve during the sessions. As required by the university ethics policy, attending participants received a counselling information form (see Appendix 4.8) directing them to areas for psychological counselling post-group, if necessary, and were reimbursed for travelling costs only.

Timing

As Greenbaum (1998) recommended that group sessions last between 90 to 120 minutes and be conducted at 6pm or at 8pm, the eight groups each ran from 6pm to 8pm on consecutive weeknights (excluding Fridays) over two weeks with “greet, meet and eat” time at the start.

Staff

A professional moderator was employed to readily establish rapport, to effectively change the flow of conversation to the areas of concern, and promote the timing and manner in which the questions were raised (Zikmund, 1997). Two people staffed the focus groups – the moderator, and myself as videotape operator. As University ethics policies required a counsellor on hand when emotive issues were discussed, the moderator was a trained counsellor.

The Focus Group Procedure

At the start of each group session the moderator first defined “organisational crisis” using the discussion guide (see Appendix 4.9), and mentioned some examples of company crises from the crisis discussion sheet (see Appendix 4.10). The moderator used a funnelling
technique, initially prompting a general discussion, then later raising specific questions about each of the main crises discussed. Participants were asked to recall crises that were most salient for them. Specific questions were asked about their thoughts and feelings towards the company, why they felt this way, duration of feelings, how they felt now, who was responsible for the crisis, actions that participants had taken and any other factors they considered important. The main points were added to the whiteboard and participant feedback solicited on the accuracy of these notes. At the end of the session, participants were thanked for attending and paid a travel fee. The moderator and I next compared our impressions of group findings, then I copied down the whiteboard results.

I transcribed five of the eight videotapes, employing an experienced stenographer to transcribe the other three, and checked and corrected the accuracy of all transcriptions against the videotapes. Verbal material only was transcribed, sarcastic comments were noted and emphatic responses received an exclamation mark.

**Qualitative Data Analysis: the Three Stages**

While a theoretical model was developed prior to holding the focus groups, an inductive method was used to allow patterns, themes and categories to emerge from the analysis (Patton, 1990). The three stages of qualitative data analysis were followed: data reduction, data display and conclusion drawing (Miles & Huberman, 1994).

1. **Data Reduction**

The data reduction process followed was that of Miles and Huberman (1994) and Morgan (1998). Data reduction was the process of selection, focusing, simplifying, abstracting and transforming the data in transcriptions (Miles & Huberman, 1994). This included teasing out themes and making clusters, and identifying which data chunks to code and pull out (Miles & Huberman, 1994). Congruent with Morgan’s (1998) recommendations, this involved an iterative approach, repeatedly reviewing tapes, transcripts, field notes and debriefing discussions, comparing different groups, and comments of different participants within groups, to ensure that themes and central patterns were identified, and looking for connections and divergence among the themes identified. This pattern coding grouped those summaries into a smaller number of overarching themes or constructs (Miles & Huberman, 1984). I started with an investigation of those concepts derived from the literature, then new themes were identified and coded. Finally, I re-examined and revised codes.
The second stage of data reduction involved clustering comments about each of the codes. Due to the diversity of codes and their content, use of the computer programme, QSR Nudist, proved unwieldy. Instead, using a master computer copy, coded sections of transcribed text were copied into relevant files for each identified code - e.g., emotions, behaviour. Copying large passages ensured comments remained in context. Additionally, all references to a particular crisis were grouped together under relevant focus groups to enable an overall investigation of reactions to a particular crisis, allowing comparisons between crises and groups. To help create an audit trail, participants were identified by their focus group, their gender and a number, e.g., FG2M1 refers to Focus Group 2 Male 1. Additionally, each individual’s comments were colour coded to form a coherent narrative of comments about a particular crisis, allowing a review of participants’ comments without removing them from the context of the exchange.

**Defining codes.**

Codes identified from the literature and present in focus group discussion were crisis types, attributions, responsibility, involvement and reminder cues, emotion, behaviour, accounts, level of harm, company reputation, message and source credibility and attitudes to the company. New codes were dispositional attributions about the companies and their managers, and a range of attitudes to media, to company management, to government/regulatory authorities, to crisis advertising and to crisis management.

Miles and Huberman (1994) recommended clear operational definition of codes. Main definitions from the literature were provided at the start of the thesis (see Glossary). Additional themes from the literature that emerged, as well as new themes that appeared in the focus groups are defined in Appendix 4.11.

**Grouping methods.**

Further explanation is required on grouping methods used for some items, specifically, crises, involvement, emotion and behaviour.

**Crises**

Several crises mentioned were discarded from analysis either because there was insufficient material for analysis, or they fell outside Fink’s (1986) crisis definition, or because the companies were no longer in existence.
Involvement

High involvement with a crisis was determined in several ways: first, by identification of emotionally intense comments, and if consumers mentioned that either they themselves or family and friends were directly impacted by a crisis. Additionally, during transcription, particularly loud or forceful comments were denoted with an exclamation mark; passages were also identified when participants used qualifiers to describe emotions (e.g., “very, very frustrated”) or used repeated phrases or violent language (e.g., “should be hung, drawn and quartered”) or profanities (e.g., “bastards!”); also through participants’ use of stronger emotion words (e.g., in the anger category: outrage, angry, loathe, vengeful and contempt; in the surprise category: amazed; in the fear category, panic, horror, alarm and distress; and in the sad category: suffer).

Emotions

Although there was no previous model of crisis emotions, I needed to sort emotions into their relevant categories in order to identify whether there was any association between emotions and particular crises or behaviours. Categorising emotions proved challenging for two reasons: first, focus group participants articulated over 80 emotion words, which required a large emotion list to enable sorting words into categories; second, participants often expressed emotions without using emotion words - e.g., through profanities. To locate an emotion list with terms closest to that generated by participants, I examined Fisher’s (1997) Job Emotion Scale (JES), Burke, Brief, George, Roberson, and Webster’s (1989) Job Affect Scale (JAS), Batra and Ray’s (1986) typology of affective responses to advertising, Richins’ (1997) consumption emotion list and Shaver et al.’s (1987) emotion list. As Shaver et al.’ s (1987) list, identified by Weiss and Cropanzano (1996), contained 135 emotion words sorted into six commonly accepted categories of anger, fear, sadness, joy, surprise and love, this list was selected. Bennett, Härtel, and McColl-Kennedy (2004) also used this list in their development, via focus group research, of a service emotion taxonomy. Anger, fear, and sadness are considered negatively valenced, joy and love positively valenced, and surprise neutral (Bennett et al., 2004).

Emotion words that were not listed but which had their variations used (e.g., pleasure for pleased) or those very similar to existing words (e.g., retribution for vengefulness) were sorted into their relevant category. Despite the size of Shaver et al.’s (1987) list, some words remained uncategorized. As participants used four emotion words listed in Richins’ (1997) emotion index which were not on Shaver et al.’s (1987) list, I added these: upset and felt “bad” (which I categorised as sad), concerned (listed under fear) and calm (listed under joy).
I identified other emotion words that had not been coded and used the closest Oxford dictionary approximation: “not reassured” was coded as uneasy; “desperate” as hopeless; “sceptical” and “cynical” as contempt. This still left a substantial amount of data (about 30% of emotion content) in which participants described emotion states but did not use explicit emotion words.

To identify these emotions, two independent coders received Oxford Paperback Dictionary/Thesaurus (1999) definitions of the meanings of the Shaver et al. (1987) words plus Richins’ (1997) list to enable them to match the emotion passage to an emotion word. (See Appendix 4.12 – instruction to coders). The coders also coded some commonly used emotion words not appearing on either list and, where there was disagreement, I adjudicated. Words identified as emotions but unable to be coded included unsympathetic and unsurprised. The full list of participants’ emotion words and their coding category is in Appendix 4.13.

Coder reliability

Miles and Huberman’s (1984) formula was used to estimate intercoder reliability. The researchers suggested an expectation of 70% coder reliability. The coders exhibited 86% reliability when coding emotion passages and unlisted words into the six different emotion categories, which was the main aim. They had 56% reliability for agreement on exact word choice from a list containing 139 often very similar words. This, I contend, was most likely due to the list size.4

Behaviour

I based behaviour coding on Folkman, Lazarus, Dunkel-Schetter, DeLongis and Gruen (1986) and Folkman and Lazarus’ (1988) categories of problem-focused and emotion-focused coping behaviour. Problem-focused coping behaviour is directed at altering the situation causing distress and includes rational problem-solving techniques, such as investigating

---

3 Intercoder reliability = number of agreements ÷ total number of agreements plus disagreements.

4 First, Shaver et al.’s (1987) list contains words with similar meanings. For example, under fear, words with similar meanings included nervousness, uneasiness and apprehension. Additionally the Shaver et al. (1987) list places similar words under different emotion categories - e.g., compassion, sympathy and pity are similar, yet compassion belongs to the love category, while sympathy and pity are sadness category words. As well, insult, a word used by participants in angry tones, is listed by Shaver et al. (1987) under sadness. Shaver et al. (1987) also listed shock under fear, whereas participants seemed to use it to indicate strong surprise.
different solutions to a problem and creating an action plan, as well as direct action, such as confrontive strategies describing aggressive efforts to alter the situation (Folkman et al., 1986; Folkman & Lazarus, 1988). Emotion-focused coping behaviour is more likely to be used if the outcome is appraised as unchangeable (Folkman & Lazarus, 1988). It is aimed at regulating distress and involves such strategies as seeking social support, distancing, avoidance, positive reappraisal, exercising self-control and escape-avoidance (Folkman et al., 1986; Folkman & Lazarus, 1988). This was congruent with the argument made in AET in Chapter 2 for both affect-driven and judgment-driven behaviour.

2. Data Display – Findings

In this section I first describe the crises that participants discussed, then cover the findings for each of the codes identified.

Data display is an organised, compressed assembly of information that permits conclusion drawing and action and potential use of charts, matrices and graphs (Miles & Huberman, 1994). Congruent with Miles and Huberman’s (1994) recommendations, I noted regularities, patterns, causal flows and possible configurations before drawing conclusions (Miles & Huberman, 1994). I summarised the findings from each crisis (see Appendices 4.14.1 to 4.14.10), noting all the explicitly stated linkages between attributions about crisis cause, responsibility judgments, emotions, cognitions and behaviour. Additionally, starting with the main variables from the literatures, I examined patterns and regularities before drawing conclusions.

Participants lengthily discussed seven local crises as these had impacted them either directly or indirectly: the Ansett airline safety crisis (discussed in all eight focus groups), separate Legionella outbreaks at the Melbourne Aquarium and the Alfred Hospital (FG 1, 2, 4, 5, 6, 7), separate extortion attempts affecting both Panadol and Herron paracetamol products (FG 3, 5, 6, 7, 8), the Esso gas crisis (FG 1, 2, 3, 4, 6, 8) and Kraft’s peanut butter contamination and recall (FG 3, 4, 5, 8). Both the Legionella crises had occurred at similar times, as had both the paracetamol tamperings, and participants discussed each pair jointly. Crises less discussed, but also analysed, were McDonald’s McMatch and Win contest (FG 6, 7) which occurred in Australia, Britain’s Mad Cow beef crisis (FG 2, 6, 8), Nike’s sweat shops (FG 5, 8), which had most publicity in the USA, the Ford Pinto case (FG 3) which occurred in the USA, and the international Nestlé baby milk formula crisis (FG 5). As I will
discuss findings from each of these crises in the next sections, it is timely that I give a brief summary of each crisis (see Table 9).
### Table 9 Summary of crises discussed by focus group participants

<table>
<thead>
<tr>
<th>Year</th>
<th>Company</th>
<th>Crisis</th>
<th>Costs/injury/outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Ansett, Australia.</td>
<td>This major domestic airline’s fleet of 10 Boeing 767s was grounded by the Civil Aviation Safety Authority (CASA), a government authority, following safety checks that revealed cracks. Flight cancellations led to travel chaos, and reputation damage.</td>
<td>Grounding: $4.24 million; Ad campaign: $20 million (Ansett to launch, 2001). Lost 20% market share to alternate carriers (Creedy, 2002). The company later collapsed.</td>
</tr>
<tr>
<td>2001</td>
<td>Alfred Hospital, Australia.</td>
<td>Legionella outbreak at Melbourne’s government-operated Alfred Hospital.</td>
<td>Two people were killed (Milligan, 2001).</td>
</tr>
<tr>
<td>2000</td>
<td>Melbourne Aquarium, Australia.</td>
<td>Australia’s largest Legionella outbreak occurred in April 2000, four months after the opening of this major tourist facility. The outbreak had its source in the Aquarium’s air-conditioning cooling towers (Button, Forbes, &amp; Foley, 2000).</td>
<td>Four people dead, 144 infected (Legionnaire’s hearing, 2004). Trading losses: $3m, class action $35m (Minter Ellison Lawyers, 2003).</td>
</tr>
<tr>
<td>2000</td>
<td>Smith Kline Beecham, Australia.</td>
<td>Leading paracetamol brand, Panadol, was recalled after an extortionist laced supermarket packets with strychnine.</td>
<td>Two people hospitalised; $35 million in lost sales (Lloyd, n.d.).</td>
</tr>
<tr>
<td>2000</td>
<td>Herron, Australia.</td>
<td>Herron paracetamol recall after an extortionist laced supermarket packets with strychnine.</td>
<td>Two people became ill (Thomas, 2000).</td>
</tr>
<tr>
<td>1999</td>
<td>McDonald’s, Australia.</td>
<td>Dispute between the company and customers over prize claims in McDonald’s McMatch and Win game. The court found in favour of McDonald’s.</td>
<td>More than 6,000 disgruntled customers took McDonald’s to court (Klotz &amp; Devai, 2001).</td>
</tr>
<tr>
<td>1996</td>
<td>Kraft, Australia.</td>
<td>In Australia’s biggest food recall, the food giant recalled various brands of peanut butter. The roasted peanuts, shipped to Kraft by a Queensland supplier, were contaminated with mouse droppings.</td>
<td>Widespread salmonella poisoning of at least 50 consumers, including many children (Jones, 1996).</td>
</tr>
<tr>
<td>1980 to 1996</td>
<td>British beef industry – Mad Cow outbreak.</td>
<td>A new strain of Creutzfeldt-Jakob disease (CJD) was confirmed. The disease, which kills brain tissue (Neergaard, 2000), was traced to cattle feed made from remains of scrapie-infected sheep.</td>
<td>By the year 2000, 95 people were infected in the United Kingdom (Fox, 2000).</td>
</tr>
<tr>
<td>1996</td>
<td>Nike, USA.</td>
<td>Nike received international attention for use of underage workers in Cambodia (Kenyon, 2000), and “sweat shop” labour in less developed countries.</td>
<td>Sweat shop labour used in Nike factories in countries like Indonesia and Cambodia.</td>
</tr>
<tr>
<td>1981</td>
<td>Ford Corp., USA.</td>
<td>Ford Corporation charged with criminal homicide for deaths involving its Pinto. After a costs/benefits analysis, Ford estimated it would pay less for civil suits in wrongful death and injury cases than for the costs of changing safety designs (Prince, 2000).</td>
<td>Multiple deaths occurred when the Pinto’s fuel tank ruptured during rear-end collisions, causing the vehicle to burst into flames.</td>
</tr>
<tr>
<td>1977</td>
<td>Nestlé, international.</td>
<td>Nestlé successfully sued a Swiss pressure group over a pamphlet claiming that Nestlé helped kill children in less developed countries through the way it marketed its infant formula product (Heath, 1998).</td>
<td>The court case led to an American-instigated international boycott of Nestlé products (Heath, 1998).</td>
</tr>
</tbody>
</table>
Findings regarding the main variables identified in the literature.

As noted earlier, the main variables identified in the literature and discussed by focus group participants were primary appraisal of involvement, secondary appraisal of attribution, crisis type, responsibility and behaviour.

Primary appraisal - involvement

As it had been argued that involvement with a crisis resulted from a consumer’s concerns, needs, values, interests, goals and beliefs and determines emotional intensity, there was the expectation that, if participants or their families were directly impacted by a crisis, then they would have a high level of involvement and report strong emotions or make emotionally intense comments. This was found to occur. For example, in referring to the Panadol tampering, FG8M1 said, “when things can impact your children you just get a lot more angry about it, and a lot more potentially upset”. Additionally, many participants’ definition of a crisis contained an involvement component, with some insisting that a crisis is one that personally affects you or your family, particularly their health and wellbeing. As FG7F1 put it: “There’s degrees of crises and the relativity of the individual or company. You might be genuinely concerned for your fellow person, but it’s not a crisis to you necessarily. It’s a crisis to the person whose kid was at the Aquarium and is in the hospital fighting for their life”.

While emotionally intense comments were found for all crises, meaning that no one crisis type was exempt from strong consumer emotional reactions, many strong feelings were reported by participants not directly impacted by various crises. However, these crises may have impacted participants’ values, concerns or beliefs. Additionally, not all participants who were strongly impacted by crises made emotionally intense comments.

Crisis type, attributions and responsibility

In their crisis discussions, participants often directly linked responsibility and attributions about the crisis cause (see the summary in Table 10 and detailed crisis listings in Appendix 4.14). The perceived crisis cause was predominantly viewed as internal to the company and controllable by it, or external to, and uncontrollable by, the company, with one crisis viewed as having ambiguous causes. Congruent with the literature, there was a strong link between attributions and responsibility.
<table>
<thead>
<tr>
<th>Crisis</th>
<th>Attribution regarding crisis cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ansett safety crisis: grounding of its 767 fleet.</td>
<td>Three sets of consumer attributions about crisis cause appeared: Ansett was at fault for the safety crisis due to poor maintenance (int/controllable); The government agency, CASA (and, in part, the media), were to blame for scapegoating Ansett and blowing the crisis out of proportion (ext/uncontrollable); Also, to a lesser extent, maintenance problems were endemic to the Australian airline industry due to cost-cutting following deregulation; thus the Federal government was to blame for the current situation (external/uncontrollable) (see Appendix 4.14.1).</td>
</tr>
<tr>
<td>Legionella outbreaks at Melbourne Aquarium &amp; Alfred Hospital, Melbourne</td>
<td>As participants identified Legionella outbreaks affecting many other Melbourne buildings, the main crisis cause was believed to be pervasive bacteria in the environment. However, participants also attributed the crisis cause to a lack of water tower maintenance due to building owners’ cost cutting and lack of regular testing. This, in turn, resulted from the State government’s move to company self-regulation of safety procedures. Participants’ attributions therefore combined external/uncontrollable causes (environment and inadequate government regulations) with an internal/controllable cause (lack of maintenance) (see Appendix 4.14.2).</td>
</tr>
<tr>
<td>Panadol &amp; Herron paracetamol recalls</td>
<td>Consumers attributed the crisis cause to extortion/terrorism with the extortionist held responsible (see Table 9). This was clearly perceived as a crisis whose cause was external to the company and uncontrollable by it (see Appendix 4.14.3).</td>
</tr>
<tr>
<td>McDonalds McMatch and Win</td>
<td>Participants considered this to be a borderline crisis at most because no lives were endangered. Participants thought the crisis cause was McDonald’s mistake with the tickets, not the customers’ fault, an internal/controllable attribution, and saw them as responsible (see Appendix 4.14.4).</td>
</tr>
<tr>
<td>Esso gas crisis</td>
<td>In this crisis, consumers attributed the crisis cause to poor maintenance by the company, a factor internal to and controllable by it. The company was predominantly seen as responsible (see Appendix 4.14.5), a conclusion reached by a government inquiry.</td>
</tr>
<tr>
<td>Kraft product recall</td>
<td>Kraft’s failed quality procedures (internal/controllable factors) were pinpointed as the crisis cause and Kraft was viewed as responsible for not providing a safe product (see Appendix 4.14.6).</td>
</tr>
<tr>
<td>Mad Cow (CJD) outbreak in England</td>
<td>Although the “Mad Cow” crisis was caused by farmers using tainted cattle feed, in only one case were farmers held responsible. Instead the responsibility for the crisis and its effects included scientists for approving the feed, the government for deregulation or encouraging continued beef eating, thereby placing more lives at risk, the media for ridiculing scientific warnings, decision-makers for their lack of concern and slaughterhouses for their slaughtering techniques. The crisis was therefore mostly viewed as external to, and uncontrollable by, the farmers (see Appendix 4.14.7).</td>
</tr>
<tr>
<td>Nike</td>
<td>Corporate greed was seen as the crisis cause and was therefore attributed to internal/controllable factors. Its management was considered mostly responsible, although the foreign government was judged partly responsible for failing to impose stricter operating procedures. Customers were also judged partly responsible for continuing to buy Nike products and thereby encouraging sweatshop practice (see Appendix 4.14.8).</td>
</tr>
<tr>
<td>Ford Pinto deaths</td>
<td>This crisis was viewed as caused by Ford ignoring the fuel line problem (an internal/controllable crisis), with judged Ford as responsible (see Appendix 4.14.9).</td>
</tr>
<tr>
<td>Nestlé baby milk formula crisis</td>
<td>Focus Group 5 discussed this crisis and one participant deemed the cause to be Nestlé’s marketing strategy, thus an internal/controllable cause. While Nestlé was seen as predominantly responsible, one participant allocated responsibility also to foreign governments and health authorities (see Appendix 4.14.10).</td>
</tr>
</tbody>
</table>
Emotions

Participants recalled their emotions, who or what they were directed at, and their duration. In this section I examine the emotions elicited and find, congruent with the literature, the strong link between attributions about crisis cause and emotions was clearly apparent.

Emotion targets

As emotions are object-oriented (Weiss & Cropanzano, 1996), participants directed emotion at two distinct groups: those considered responsible for the crisis - or its outcome - and those impacted by the crisis. Those responsible, and targets of negatively valenced emotions, were companies and their managers, spokespeople, employees and public relations consultants. Those also considered responsible, but external to the company, were state and federal governments and their agents, the media, unions, extortionists, and with Nike, athletes promoting Nike, and customers who continued buying. Those impacted by the crisis and the targets of positively valenced emotions included the company as a victim (e.g., Herron) and its employees, one’s social group, the general public (e.g., the sick and elderly), company employees, unions and scapegoats. Yet, sometimes the situation itself engendered emotion. For example, in the Esso gas crisis FG4M2 was, “annoyed that I couldn’t have a shower”.

Emotions elicited

Participants reported recalled emotions in all six categories, with the largest number of words clustered under anger (which was voiced for all crises), followed in a descending order, by fear, joy, sadness, surprise and love. Most people recalled a mix of emotions for each crisis. Participants’ list of emotion words is tabulated in Appendix 4.13. The extent of positively valenced emotions directed at the company, the crisis and the victims, was a surprise finding.

A review of the range of recalled emotions for each crisis (see Table 11) found that, congruent with expectations from studies using Weiner’s (1986, 1995) attribution theory (e.g., Jorgensen 1994, 1996) crises perceived as internal/controllable (Ansett, McDonald’s, Esso, Kraft, Nike, Ford, Nestlé) evoked anger as the dominant emotion. External/uncontrollable crises (paracetamol crises, Mad Cow, the CASA-responsible Ansett crisis) were expected to evoke sympathy, a sad category word, yet these results held only for the paracetamol crises where sympathy was the main emotion elicited, closely followed by fear. The Mad Cow crisis mainly elicited fear, while the CASA-responsible crisis also elicited fear. Although Jorgensen (1994) reported that ambiguous crises received high anger, instead I found the ambiguous
crises (the Legionella outbreaks) elicited fear and anger as dominant emotions. From the literature it was expected that internal/controllable crises would elicit anger at the company, while external/uncontrollable crises would elicit sympathy. Yet the highest anger of all was expected for crises perceived as ambiguous, that is, combining both internal and external, controllable and uncontrollable factors. A comparison of the number of different emotion category words used in every crisis to attributions of crisis cause showed that this prediction held in most cases. These crises are also discussed.

Table 11 Number and percentage of recalled emotion words per crisis (note: highest % is in bold)

<table>
<thead>
<tr>
<th>Crisis type/attributions</th>
<th>Anger</th>
<th>Sadness</th>
<th>Fear</th>
<th>Joy</th>
<th>Surprise</th>
<th>Love</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal/controllable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ansett safety crisis:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ansett responsible</td>
<td>No. = 24</td>
<td>No. = 4</td>
<td>No. = 9</td>
<td>No. = 5</td>
<td>No. = 1</td>
<td>No. = 1</td>
</tr>
<tr>
<td>55%</td>
<td>9%</td>
<td>20%</td>
<td>11%</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>McDonald’s McMatch &amp; Win</td>
<td>No. = 9</td>
<td>No. = 6</td>
<td>No. = 2</td>
<td>No. = 0</td>
<td>No. = 4</td>
<td>No. = 2</td>
</tr>
<tr>
<td>39%</td>
<td>26%</td>
<td>9%</td>
<td>0%</td>
<td>17%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Ford – Pinto deaths</td>
<td>No. = 8</td>
<td>No. = 3</td>
<td>No. = 1</td>
<td>No. = 0</td>
<td>No. = 0</td>
<td>No. = 0</td>
</tr>
<tr>
<td>67%</td>
<td>25%</td>
<td>8%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Esso gas crisis</td>
<td>No. = 29</td>
<td>No. = 12</td>
<td>No. = 10</td>
<td>No. = 4</td>
<td>No. = 1</td>
<td>No. = 0</td>
</tr>
<tr>
<td>57%</td>
<td>24%</td>
<td>10%</td>
<td>8%</td>
<td>2%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kraft – tainted peanut butter</td>
<td>No. = 14</td>
<td>No. = 6</td>
<td>No. = 7</td>
<td>No. = 4</td>
<td>No. = 0</td>
<td>No. = 1</td>
</tr>
<tr>
<td>44%</td>
<td>19%</td>
<td>22%</td>
<td>12%</td>
<td>0%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Nike sweat shops</td>
<td>No. = 13</td>
<td>No. = 7</td>
<td>No. = 0</td>
<td>No. = 0</td>
<td>No. = 1</td>
<td>No. = 1</td>
</tr>
<tr>
<td>62%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Nestlé baby milk formula</td>
<td>No. = 5</td>
<td>No. = 1</td>
<td>No. = 0</td>
<td>No. = 0</td>
<td>No. = 2</td>
<td>No. = 0</td>
</tr>
<tr>
<td>63%</td>
<td>12%</td>
<td>0%</td>
<td>0%</td>
<td>25%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Ambiguous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legionella at</td>
<td>No. = 15</td>
<td>No. = 10</td>
<td>No. = 17</td>
<td>No. = 4</td>
<td>No. = 2</td>
<td>No. = 0</td>
</tr>
<tr>
<td>Aquarium &amp; Alfred Hospital</td>
<td>31%</td>
<td>21%</td>
<td>35%</td>
<td>8%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>External/Uncontrollable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ansett safety crisis:</td>
<td>No. = 13</td>
<td>No. = 3</td>
<td>No. = 4</td>
<td>No. = 3</td>
<td>No. = 0</td>
<td>No. = 3</td>
</tr>
<tr>
<td>CASA, media &amp;/or Govt. responsible</td>
<td>50%</td>
<td>12%</td>
<td>15%</td>
<td>12%</td>
<td>0%</td>
<td>12%</td>
</tr>
<tr>
<td>Paracetamol: Panadol &amp; Herron</td>
<td>No. = 8</td>
<td>No. = 14</td>
<td>No. = 9</td>
<td>No. = 8</td>
<td>No. = 0</td>
<td>No. = 2</td>
</tr>
<tr>
<td>20%</td>
<td>34%</td>
<td>22%</td>
<td>20%</td>
<td>0%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>British beef: Mad</td>
<td>No. = 3</td>
<td>No. = 2</td>
<td>No. = 10</td>
<td>No. = 2</td>
<td>No. = 1</td>
<td>No. = 1</td>
</tr>
<tr>
<td>Cow, BSE outbreak</td>
<td>16%</td>
<td>11%</td>
<td>53%</td>
<td>11%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>
During the Ansett safety crisis, one participant had her flying plans severely disrupted, although many others, who were regular flyers, were not directly impacted. As reported in Table 11, there were three sets of consumer attributions that, congruent with Weiner’s (1986) attribution theory, determined reported emotions. When Ansett was considered at fault for safety breaches, anger category words predominated (55%), followed by fear, with some joy and sadness words, and one word each for love and surprise categories (see Table 11), while some claimed to be unsurprised or had no feelings about this crisis. The anger words were related to the company’s lack of maintenance, their handling of the crisis and their subsequent advertising campaign. As FG2M5 said, “With Ansett I’m angry because that’s maintenance that they could have done”. Fear words were predominantly related to fear of flying with Ansett for self or others. While there was sympathy for maintenance staff and travellers, most positively valenced emotions were not to Ansett’s advantage, with a typical comment by FG7M1: “I have to say I have mixed feelings. I was glad that these safety issues were brought to light. I’ve had several problems with the company previously and so I dislike them and I was glad to see their name go through the mud”. Seven participants who believed Ansett was at fault disliked Ansett’s reassuring advertising campaign, found it annoying and it engendered disgust (see Appendix 4.14.1).

For McDonald’s McMatch and Win crisis, the major reported emotion was anger (39%), predominantly feelings of disgust and bitterness regarding McDonald’s handling of the crisis) followed to a lesser degree by sadness for those who lost prizes, then surprise words regarding McDonald’s actions. There was a small number of fear words and love words. This was one of the few crises where surprise was felt, and was to do with McDonald’s taking the case to court and winning (see Appendix 4.14.4).

When discussing Ford, even though no participants were personally impacted, anger (particularly disgust and outrage) was the dominant emotion (67%), with some sadness and one fear word. FG3M5 said, “That’s exactly they’re thinking… If we kill those people it’s cheaper than recalling those cars. Arseholes! But money is more important than human life”. Sadness referred to feeling hopeless regarding changing this type of situation (see Appendix 4.14.9).

All participants, except two, were personally impacted by the Esso gas explosion, which caused a two-week loss of household gas for showers and cooking. Participants mainly used anger category words (34%), then sadness words, followed by fear, joy and surprise, but
no love words. FG2M2 said, “I was taken by surprise...You don’t expect to wake up in the morning and go, ‘something’s blown up’...”. Annoyance was due to the disruption, with a sense of hopelessness (sad category) that nothing could be done about the problem. Anger was directed at the company for scapegoating workers, and towards the State Premier, Jeff Kennett, for his insensitive comments. There was fear related to turning off the household gas supply. Some people enjoyed the community spirit that emerged as neighbours with electric water heaters shared their showers. For example, FG4F3 said, “It was quite a good time, despite what was going on, you know. There was nice stuff happening between people”. (see Appendix 4.14.5).

With Kraft’s peanut butter recall, a number of participants were regular consumers of the product. Anger was the dominant emotion category (44%, see Table 11). Annoyance was felt regarding the inconvenience of not having a preferred product to use. Disgust was felt over the contamination with mouse droppings and towards the parent company, Phillip Morris. As FG4F3 said, “I guess I was angry....because ...the kids eat the peanut butter...why are these bastards doing this to my kid?” The next most common emotions were fear and sadness, with a small number of joy and love words, but no surprise words. Fear was felt regarding the likelihood of becoming ill (see Appendix 4.14.6).

While no one was personally impacted by the Nike crisis, the anger category dominated, followed by sad words and one surprise word, with no joy or fear words. Participants used mainly lower level anger words (e.g., annoyed, frustrated) to refer to Nike’s lack of ethical practice. Nike was viewed as a big corporation exploiting workers when it could afford not to, although one person felt contempt towards customers. The sad words were predominantly disappointment with Nike’s practice and with athletes promoting Nike (see Appendix 4.14.8).

With the Nestlé baby milk formula crisis, emotions elicited were predominantly anger (63%, especially disgust), with surprise and sadness. There was no reference to fear or love words (see Appendix 4.14.10). No one in the group was personally impacted by this crisis.

The only ambiguous crises were those involving Legionella outbreaks. Two participants had visited the Alfred Hospital during the Legionella contamination period. Several participants had visited the Melbourne Aquarium during the contamination period and been tested for Legionella, while two had family or friends visit during that time. One participant (FG1F2) had contracted Legionella and was involved in a class action against the
Aquarium. Therefore it makes intuitive sense that these two separate Legionella outbreaks evoked mainly fear (35%, see Table 11) for self, family or friends contracting the illness. For example, FG7M3 said, “with regards to legionella, this is something that worries me because... I was in the vicinity....and I’m going shit, the Aquarium, shit...”. The next most common emotion was anger, then sadness, joy and surprise, with no love words. As FG1F1 said, “I was very elated that we didn’t get sick...”. In the Alfred Hospital outbreak, much of the anger was directed at the Health Department for its perceived cover up, as the public was only informed in June of the first Legionella-related death in March (see Appendix 4.14.2).

Crises considered to be external and uncontrollable to the company were the CASA-responsible Ansett airline crisis and the paracetamol tamperings. The second main attribution about the Ansett crisis, which saw government safety watchdog CASA to blame for unnecessarily grounding Ansett planes, also generated a high number of anger words (50%), but directed at CASA and the government. As FG7F1 said, “Responsible for the hullaballoo that occurred? CASA and the media.... I was really really angry about the whole thing”. There was also some reported fear, sadness and joy as the attack on Ansett engendered sympathy, sorrow and compassion towards Ansett, pride in Ansett’s honesty and anger and disappointment with the media. Of all the crises, this had by far the highest number of love words used (see Table 11). There was a general fondness because, “airlines in Australia are as good as it gets”. A small number of participants also perceived maintenance problems as industry, not airline based, and due to federal government deregulation.

The Panadol and Herron crises mainly evoked recalled sadness (34%), mainly sympathy for the companies, followed by fear, anger and joy in almost equal proportions, and one reference to love, but no surprise. A typical comment by FG7M3 regarding Panadol directed sympathy at the company: “I felt sorry for the company and I thought, I hope they catch the bastard that done it”. Anger was directed at the extortionist who was, according to FG7M4, a “nasty creature who should be hung drawn and quartered..”. Much of the fear reflected parental concern that no suitable replacement painkiller was available for children, because many parents (e.g., FG7F1) perceived that “there virtually wasn’t a substitute” for Panadol liquid for children. Consumers were also pleased by the reassuring ads (see Appendix 4.14.3).

With the British beef industry’s BSE outbreak, two participants lived in England during the contamination period, while most were aware of the dangers of imported products. Fear was expressed (53%), mainly for self or family becoming ill, particularly by those living in
England during the contamination period. As FG6F4 said, “I was involved with the Mad Cow disease. I lived for six years in England, four years right at the peak….that’s a bit scary because now I’ve sort of got that in my head, and my husband too, that we could, in the long run…..(pause)…..I’m also frightened for my children because I was pregnant there.” There was also some concern for others, particularly infants exposed to baby food and immunizations. Other emotions were anger, sadness and joy, with few surprise and love words (see Appendix 4.14.7).

Emotion duration and reminder cues

While AET views emotions as temporary affective states, participants estimated that their emotions ranged in duration from transient states to a permanent, enduring condition. FG3M5, earlier quoted about Ford said, “I’ll always feel that way”. Participants also reported experiencing emotions when reminded of crises through discussion or fresh media stories, even though some occurred up to 25 years ago. As FG6M1 said, “…if you bring it up and refresh our memory like what’s happened tonight, we still feel the same as in the feelings. They haven’t changed…”. In Chapter 2, I proposed a possible explanation: once the publicity dies down, the consumer may forget about the crisis, however, as part of the involvement process, reminder cues (such as media stories) may temporarily reactivate earlier emotions. Focus group participants related this process. When discussing the Kraft peanut butter crisis, FG3F1 said, “I think the press can keep momentum for however long…the story is newsworthy. And then once it’s kind of gone, it fades out of your mind, your life takes over and um, and then you’re onto the next thing and so. And then you, maybe something, there’s a small little article in the paper and you go ‘Oh yeah, I forgot about that.’ ”

Behaviour

Using Folkman et al. (1986) and Folkman and Lazarus’ (1988) behaviour categories discussed earlier, I divided reported behaviour into problem-focused and emotion-focused categories. As problem-focused behaviour includes rational problem-solving techniques and formulating action plans (Folkman & Lazarus, 1988), crisis behaviour included dealing with crisis practicalities, such as product return for the Kraft and paracetamol crises, and providing showers or cooking for others in the Esso crisis, and tended to be crisis-specific behaviours. Problem-focused behaviour also includes hostile behaviour designed to either alter the situation, or show that the participant was taking action (Folkman et al., 1986), such as boycotts. As emotion-focused behaviour aims to reduce distress, this includes strategies such as discussing problems with others, avoidant and distancing strategies associated with the product or service (Folkman et al., 1986). From the focus group results, I categorised
emotion-focused behaviour into eight groupings (see Table 12). However, one behaviour, information search, described by Folkman and Lazarus (1988) as “vigilant coping”, can be either emotion-focused, reducing distress by increasing understanding and a sense of control, as well as problem-focused, using information for planful problem-solving (Folkman & Lazarus, 1988).
<table>
<thead>
<tr>
<th>Main reported emotion-focused behaviours</th>
<th>Company/products impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Word-of-mouth behaviour:</td>
<td></td>
</tr>
<tr>
<td>- discussions with family and friends</td>
<td>Panadol, Herron paracetamol</td>
</tr>
<tr>
<td>- encouraging others to boycott</td>
<td>Nike</td>
</tr>
<tr>
<td>2. Avoidance (temporary or permanent)</td>
<td>Ansett; Kraft; Melbourne Aquarium</td>
</tr>
<tr>
<td></td>
<td>British beef</td>
</tr>
<tr>
<td>3. Product switching (temporary or permanent)</td>
<td>Panadol and Herron paracetamol; Kraft; Esso</td>
</tr>
<tr>
<td>4. Reduced product usage</td>
<td>Kraft’s Vegemite; Nestlé’s coffee</td>
</tr>
<tr>
<td>5. Complaining – to a Government department of authority, to the media and to the company</td>
<td>Melbourne Aquarium; Alfred Hospital</td>
</tr>
<tr>
<td>6. Taking legal action</td>
<td>Melbourne Aquarium</td>
</tr>
<tr>
<td>7. Inaction/continued buying</td>
<td>McDonald’s; Ansett; Ford, Nike; Esso; Melbourne Aquarium; Alfred Hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emotion and problem-focused behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Information search</td>
</tr>
<tr>
<td>- searching newspapers</td>
</tr>
<tr>
<td>- searching the internet</td>
</tr>
<tr>
<td>- seeking information from Government departments</td>
</tr>
<tr>
<td>- seeking information from the company and supermarket staff</td>
</tr>
<tr>
<td>- checking product labels</td>
</tr>
<tr>
<td>- seeking information on alternate products</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problem-focused behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Boycotts (temporary or permanent)</td>
</tr>
<tr>
<td>10. Crisis-specific behaviours</td>
</tr>
</tbody>
</table>
The Ansett safety crisis elicited no major behavioural differences between the Ansett or CASA responsible crises, and many participants did not discuss their behaviour. Company-directed behaviour ranged from a determination never to fly again (“take a train”), never fly Ansett (“Chance it with Ansett”), continuing to fly Ansett, to trial Virgin Blue, continuing to fly Qantas and discussion at dinner parties and with fellow travellers (see Appendix 4.14.1).

Behaviour directed at the Aquarium included legal action (by the Legionella sufferer), avoidance (with participants having either a permanent or short-term intent) and cancelling a Christmas party scheduled at the Aquarium. Action directed at the Alfred Hospital was avoidance until the problem was fixed, writing to those involved, and information seeking by phoning the Health Department and hospital. Some participants still intended to visit the Aquarium or the Alfred, while others saw no possibility for action. Crisis coping behaviour included being tested for the illness after contracting symptoms and phoning a warning to overseas friends who visited the Aquarium (see Appendix 4.14.2). Attending the focus group was also viewed as participants’ chance to have their voice heard.

In the paracetamol tamperings and recall some consumers returned products and sought a refund, while others simply disposed of products. Parents had to quickly find a Panadol liquid replacement as, “you’ve got to have it all the time”, with some consumers permanently switching to the cheaper Amcal chemist brand of children’s drops. Others thought their purchases were outside the tampering period and continued using the product. Many consumers switched back to Panadol post-crisis. Coping behaviour referred to discussion of the crisis with family, friends and workmates (see Appendix 4.14.3).

Buying behaviour was not strongly affected by McDonald’s McMatch and Win crisis as most participants reported continued consumption, although there was a little avoidant behaviour (avoiding contest, temporarily avoiding buying). There was some group-influenced behaviour claims. For example, FG6F3 said, “I won’t go to McDonald’s again. Not because of that (crisis) though, but just because their food makes my family sick”. Then later, “…because of what they did to these people I wouldn’t enter this competition again. And … “I swear away from buying the products a bit” (see Appendix 4.14.4).

With the Esso gas crisis, coping behaviour included offering or begging showers from neighbours with electricity, or using public facilities, buying in or using outdoor barbeques, buying electric heaters, rigging up makeshift showers and joking about the crisis. Company-directed behaviour included a boycott of Esso fuel (one only), switching to electric or dual-
fuel appliances, investigation of alternate energy sources for self-sufficiency (but mainly due to maintenance problems), and encouraging the union to send a letter of support to Esso workers. Thus little punitive behaviour (fuel boycott) was evidenced (see Appendix 4.14.5).

During the Kraft peanut butter recall, jars were tossed into the bin rather than refunds sought due to return costs (time, effort, petrol). Some consumers switched brands, disliked the taste and returned to Kraft after the crisis, some avoided all peanut butter for a short time, while others were permanently turned off peanut butter. Some reported behaviour that was not crisis-related: avoiding Kraft peanut butter because it was not Australian-owned and avoiding or reducing purchase of Kraft products because Kraft is owned by cigarette company, Phillip Morris (see Appendix 4.14.6).

With the Mad Cow disease outbreak, avoidant behaviour appeared strong. It included avoiding purchase of English beef or products made from beef by-products, with associated label reading, disposing of contaminated products at home or work, and avoiding products from countries that may use imported beef. One participant avoided visiting England because of the crisis (see Appendix 4.14.7).

With Nike’s crisis, reported behaviour included boycott, negative word-of-mouth behaviour, brand switching and internet search for further information. Punitive behaviour was strong, although one person who was unhappy with Nike said they still may buy Nike products. Discussion seemed to firm up opinions and intended behaviour, including intention to boycott and to tell friends, although some appeared to be a reaction to the group’s norms. One instance of reported boycott was because Nike was no longer fashionable (see Appendix 4.14.8).

With the Ford Pinto crisis, one participant continues to boycott Ford vehicles, while others’ buying behaviour was unaffected (see Appendix 4.14.9).

Focus group 5, the only group to discuss the Nestlé baby milk formula crisis, reported strong punitive behaviour, including boycotts, checking web sites, rejecting a Nestlé sponsorship and boycott intent resulting from focus group discussion, with some inconsistent behavioural claims. This, the lower age group (18-25), demonstrated the strongest peer group influence on behavioural claims (see Appendix 4.14.10).

Emotion and behaviour connections
As the literature indicated that emotion was linked to behaviour, I investigated emotion-behaviour linkages in three ways: by examining emotions and behaviour in particular crises, by examining strong emotions and behaviour, and by examining strong behaviour and emotions.

First, the emotion-behaviour link proved inconclusive, as not all recalled emotions resulted in reported behaviour. Next, the link between strong emotion and behaviour proved inconclusive because many participants recalling strong emotions did not report their behaviour. However, outrage felt towards Nestlé and Ford resulted in boycott, as did hatred of Kraft, while strong fear led to ongoing avoidance of the Aquarium. The third examination of links between strong behaviour and emotions revealed a surprising number of boycott and avoidance actions (see Appendix 4.15). Among the 53 participants, 20 took boycott or avoidant action, with Focus Group five (lower age) reporting multiple boycotts, although results for this group are not conclusive, as reported earlier. Boycotts appeared to be strongly tied to anger, with 10 boycotts being anger related. Avoidant action, on the other hand, seemed strongly related to fear, with 10 avoidant actions that were fear-related. Some mixes of anger and fear produced both actions. These results are congruent with emotion-behaviour theory. As Berkowitz (2000, p. 190) noted, “…whereas fear is typically associated with a relatively predominant avoidance tendency, an urge to get away from the perceived danger, anger is often accompanied by both avoidance and relatively strong approach inclinations, in that the anger experience is usually linked to an urge to approach and strike at some target”.

Three avoidance reactions were noted - an aversion to the product, to the entire product category, or to other products made by the same company - that were strongly related to reported fear or disgust. Product aversion after experiencing fear was evidenced in the pairing of the Melbourne Aquarium with the outbreak of Legionnaire’s disease. As FG5F3 said, “You see, I won’t go, end of story…. I’ve just been put off by it. I guess basically because the introduction of the Aquarium into my head came with Legionnaire’s disease, so I find it hard to even make a distinction because they were both introduced at the same time to me or a similar time … I know and realise it’s irrational…”. Two participants, experiencing fear and disgust regarding Kraft peanut butter being contaminated with mouse droppings, reported aversion to the entire product category (peanut butter). As FG5F1 said, “I still don’t buy peanut butter…I used to love it on toast and now I just can’t stomach it. I don’t know if it is because of that …..but it was at the same time and I never bought it, obviously, and I didn’t buy another brand and I still just can’t eat it any more…. I guess grossness at the thought that it was contaminated in that way”. Aversion to other products produced by Kraft’s parent
company, cigarette maker, Phillip Morris, was evident in comments about Kraft. As FG5M2 said, “Everything just tastes just like ash, it really does. It is just the whole association. It's not actually the taste, it’s more visual. I can just see a piece of plastic cheese having a whole pile of ash on it and somebody eating it...”.

The most reported boycotts involved Kraft peanut butter (related predominantly to anger reports), then Nike (anger), the Legionella outbreak at the Aquarium (fear), Mad Cow (fear and anger) and Nestlé (predominantly anger). The Kraft results may be confounded by the fact that some participants knew of Kraft’s ownership by the Phillip Morris cigarette company and boycotted products for this reason. No boycott or avoidance actions occurred in the paracetamol crisis (considered the extortionist’s fault) and the McDonald’s crisis (which many considered a trivial crisis). Despite the fact that some crises had occurred many years previously, participants reported continuing boycott actions.

Findings on other variables from the literature.

A number of variables were identified in the literature, which emerged in the focus group discussions, even though opinions were not specifically solicited on these topics, indicating these may play a role in crisis outcomes.

Accounts

A number of participants noted that companies avoided responsibility and located blame everywhere but with themselves. Accounts of denial or excuse (scapegoating) were noted in the McDonald’s and Esso crises. FG6F5 said, “I can’t believe that McDonald’s won the court case…And they offered no apology…they gloated… and instead focused the blame on the people. They said, ‘No it’s your fault’”. In the Esso crisis, the following exchange was recorded: FG4M3: “Well the management were blaming the workers”. FG4F3: “And the unions. They were...”. FG4M4: “Scapegoats. Scapegoats.”

Company reputation

It is commonly assumed that a good reputation plays a protective role in a crisis. In fact, product recall studies (e.g., Siomkos, 1989; Siomkos & Shrivastava, 1993) reported in Chapter 2 found that a highly respected company had more favourable outcomes. Yet this did not occur in the crisis affecting one of Australia’s oldest and most respected airlines, Ansett. Instead, focus group participants were hostile towards Ansett, which collapsed soon after the groundings of its 767s. This highlighted how little is known about the role of company reputation in a crisis.
Severity of harm

The literature (e.g., Mowen & Ellis, 1980, 1981; Tedeschi & Nesler, 1993; Weinberger & Romeo, 1989) indicated greater negative impact for companies the greater was the degree of harm caused. This led to an expectation that companies with high injury crises (i.e., Esso’s gas crisis, the Legionella outbreaks, each of which caused two deaths, and Ford’s Pinto crisis) would be deemed more responsible, with flow on effects for negative consumer emotions and behaviour. Congruent with Jorgensen (1996), these crises generated negative emotions such as anger and dislike towards the companies, and impacted behaviour. Additionally, the potential for harm (e.g., the Ansett crisis) also produced anger. As FG1M4 said, “Now when lives are at stake and nothing is done about it, that’s when the anger comes up”.

Message and source credibility

In the focus group discussions, a recurring theme was the credibility of the company spokesperson, often the CEO, as well as message credibility. In a number of crises (e.g., Ford, Ansett, the Aquarium, the paracetamol crises) a recurring theme was honesty in company communications.

Some focus group participants perceived the Melbourne Aquarium message as credible and the spokesperson as honest. As FG7F1 said, “... the general manager of the Aquarium or whoever the primary spokesperson was, in terms of their absolute honesty... the impression I had ... was the genuineness with which they were concerned, distraught about what had occurred, (leaving) absolutely no stone unturned to ensure that they could do everything reasonable within their capacity to mitigate against that in the future. And it comes back to this whole credibility and perception thing ... I think that was outstanding...”.

In contrast, Ansett was perceived negatively. FG2M5 commented, “I heard one interview with the general manager ... he lied through his teeth. Well, if he’s the sort of person to manage Ansett, I wouldn’t fly with them. He certainly wasn’t honest. He said all the planes would be back in the air in two days time and yet another eight went out. He must have known another eight were going to go out”.

New variables that emerged from the analysis.

As noted earlier, new variables emerged that had not previously been identified in the crisis and product/service literature: dispositional attributions, and attitudes to government and regulatory authorities, to media, to advertising, to management and to crisis management.
Dispositional attributions

Weiner et al. (1991) found that when a message is judged to be a lie, people may make negative dispositional attributions about the message source’s moral character, such as their honesty, sincerity and trustworthiness. People may also make these negative character inferences when those involved in wrongdoing show no penitence (Weiner et al., 1991). Focus group participants reported dispositional attributions about the company or its spokesperson in a crisis which appeared closely tied to message credibility and company accounts. For example, after judging the spokesperson’s statement to be a lie, participants made negative dispositional attributions about both Esso and Ansett management. The 1999 Royal Commission investigation into the Esso explosion had exonerated the dead workers that Esso had blamed for the crisis and instead, held the company at fault (Hannan, 1999). As FG4M2 angrily said, referring to Esso management, “They’re a bunch of liars”. Focus group participants also made dispositional attributions about Ansett management. Focus Group 3 had the following interchange: FG3F1: “Bastards!” FG3M1: “Bastards! It’s very Australian”. FG3M4: “Bastards! Illegitimate. They’re illegitimate offspring”. Such dispositional attributions reveal strong negative attitudes towards these companies caught lying. To my knowledge dispositional attributions have never previously been investigated in relation to company crises.

Attitudes to government/regulatory authorities

A striking factor emerging from these discussions was consumers’ perception of the importance of government’s role in maintaining community safety standards. In the Melbourne Aquarium Legionella outbreak, the Kraft salmonella contamination and the Esso gas crisis, there was a common perception that private companies’ drive for profit causes cost cutting, which reduces safety procedures. The State government was widely perceived to be either not enforcing safety regulations or seen as abrogating responsibility for public safety to private companies. Another failure area was when the government watchdog, CASA, was perceived by some consumers to be scapegoating Ansett airlines, following its own inadequacies in enforcing safety regulations. One comment by FG1F3 regarding the Melbourne Aquarium outbreak sums up general feelings towards government: “I felt angry. I felt that the government needs to do more inspections and regulations. And I just felt that it’s all just become laissez-faire and it’s up to private companies. And I felt that if the government had done more inspections across the board, these sort of things wouldn’t happen. I was annoyed more at the government...”.
Attitudes to media

Participants’ attitudes to the media were dichotomous: while the media were perceived as manipulating public opinion by “beating up” a crisis from nothing, they were also perceived as having a guardian-like role, informing on crisis eruption, progress and resolution.

The “beat-up” role was particularly obvious in discussions about the Ansett crisis. A number of participants believed that the media helped manufacture the crisis, e.g., FG7M4 said, “it made wonderful news copy, all these stories”, and magnify it e.g., FG2M4 said, “I think sometimes the media did give the impression, beating it up a bit, that the damn things would fall out of the sky if they don’t tighten these nuts.” This ties in with Kasperson, Renn, Slovic, Brown, Emel, Goble, Kasperon, and Ratick’s (1988) social amplification of risk framework, which was proposed to explain why risk events with minor physical consequences often elicit strong public concern and social impacts (in Frewer, Miles, & Marsh, 2002). The framework proposed that information about risk and risk events ripples out via two primary communication networks – the news media and informal personal networks – triggering public fears and increasing risk perceptions (Frewer et al., 2002). However, as a result, several focus group participants reported some distrust of the media. For example, FG4M4 said, “I guess you’ve got to trust the media to some extent, and it’s a hard one”. In contrast, the media’s guardian-like role came up in several groups’ discussions, FG7M2 said, “I believe that the media through every crisis has a lot to play with in informing consumers..” FG6M1 said, “Well you feel, because you’re not hearing about it in the headlines…that positive things have been done to rectify the problem.”

Attitudes to advertising

Participants exhibited a vast difference in emotional response to crisis advertising campaigns. The Panadol, Herron and Kraft campaigns were liked and found reassuring, despite Kraft being regarded as “mostly responsible” for the peanut butter crisis. However, seven participants spoke with strong annoyance of Ansett’s $20 million advertising campaign (AAP, 2001), designed to claw back market share, perhaps because participants saw this as a misuse of funds in a crisis caused by lack of maintenance through cost cutting. A typical comment by one participant, FG7F3, was, “they are actually in this advertising campaign when they could be using the money for safer systems.”

Attitudes to companies and managers
Negative attitudes about companies were evident in comments made about Esso and may have impacted judgments of responsibility about the crisis cause. Regarding Esso, FG1M2 rhetorically asked why the crisis occurred. “You know why? They cut corners. And they kept on cutting corners. Because you know what they were interested in? The enormous profits. They weren’t interested in you, me or anyone else sitting in this room or anyone outside.” In Focus Group 2, there was the following exchange, FG2M1: “… their standards, quality control procedures were probably pretty lax”. FG2F3: “So, profits before care or standards”. FG2M4: “The problem you’re describing there…the companies not being concerned, I mean, every company is the same way.”

In general, participants had very poor opinions of company management, believing (except for the younger age cohort) that management is largely to blame for company crises. As FG3M1 said of Ansett, “You don’t blame an airline for having a plane hijacked. But if it’s a safety regulation, that’s a different story. That’s a management problem”. A number of participants considered that managers should be held personally accountable, to the extent of being gaoled, for the results of their decisions. For example, FG3M4 said, “I’m very cynical. I believe that in Nuremburg the defence was, ‘we were following orders.’ But now it’s ‘we were following shareholders orders.’ And I actually see very little moral difference because they actually don’t see people being bayoneted or dying or unemployed or taken out on the wire for all that stuff. They are totally insulated from the impacts of their decisions or relative competence.”

Negative appraisals were also to do with high management wages. As FG3M1 said, “You can’t help feeling if they’re paying themselves a million dollars a year in directors’ fees, they ought to have some responsibility and some reason, a very good reason, for earning that million dollars and one of those reasons is preventing their corporation from falling over.”

Attitudes to company’s crisis management

In the paracetamol recalls, a number of participants liked Smith Kline Beecham’s and Herron’s approach to crisis management, thought the Ansett crisis was considered badly handled, while views diverged on the Aquarium. The Kraft recall was considered to have been responsibly handled.

In the Panadol recall, the company publicised procedures designed to safeguard consumers, engendering positive feelings. FG3M5 said, “OK, they’ve done the right thing,
they’ve recalled all the product, it’s going to be OK again soon. So I think it washes pretty quickly”. There was satisfaction with Herron’s handling of the crisis. FG3M1 said, “In the case of Herron they reacted very quickly and I’ve got a lot of respect for them for that…they’ve earned their corporate brownie points”. In contrast regarding Ansett, FG7M3 said, “Well they could have handled it much better than they did…the sloppiness of the procedures to deal with the lack of planes, the way that the people basically were just left hanging about not knowing what’s going on”. Different views emerged about the Melbourne Aquarium’s crisis management. As FG1F3 said, “…the spokesman from the Aquarium was quite upfront and was trying to be honest with the public and I was quite impressed with that. So as far as PR went, it was the right way to handle it”. Yet a legionnaire sufferer, FG1F2, believed post-crisis handling could have been improved. She said, “…I was very very sick … at one time I thought I was dying…but what really has annoyed me since is the fact that they opened the Aquarium to a big reception, welcoming people back into it…and I sort of thought at the time well, wouldn’t it have been nice had they sent all those people that contracted Legionella’s disease from the Aquarium an invitation?"

It was also apparent that corporate culture was sometimes seen to contribute to poor crisis management. As FG3M4 said of Ford, “That’s part of their psychology, to bury mistakes”.

Demographic factors: Gender, Age, Income, Culture, Education and NA.

The literature review led to an expectation of differences in emotional or behavioural responses according to gender, age, income, education and culture, however, no marked differences occurred, although there was an age bias. The results for each factor are now discussed.

Gender

Despite expectations from the literature, no major gender differences were found in anger intensity (Averill, 1982), emotion expression (Kassinove et al., 1997) or men expressing their anger more often (Timmers et al., 1998). This could be due to the focus group self-selection process, with responding male participants fully aware through recruitment and informed consent material that emotions were to be discussed.

Both men (n = 30) and women (n = 23) were equally comfortable using anger category and emotionally intense words, including expletives, to describe their emotions. Timmers et al. (1998) suggested that women express disappointment, fear and sadness more than men do,
yet both sexes equally expressed disappointment and fear, while in contrast to Timmers et al. (1998), more men expressed sadness than did women, particularly sympathy towards companies. While one male, FG1M3, identified others’ emotions in a pseudo-moderator role, male participants sometimes had difficulty articulating felt emotion, preferring to use profanities. Additionally, when the moderator pushed a male participant to identify the emotion, in three different focus groups a female participant supplied the emotion word. An example is in the following exchange between FG8M1 and FG8F1 discussing Panadol.

Moderator: “So what were your feelings towards the extortionist?” FG8M1: “I just thought he was a bit of an arsehole because he basically can kill people”. Moderator: “So what was the feeling?” FG8M1: “He’s an arsehole!” Moderator: “That’s not a feeling.” FG8F1: “Disgust”. FG8M1: “Yeah, disgust.”

Education/income

Although the literature (e.g., Weinberger & Romeo, 1989) indicated that the behaviour of less educated, lower income groups would be more affected by crises, the study results showed little apparent difference in either emotions or behaviours between groups matched high and low on income and education. However, the higher income group were least likely to report boycott actions. Additionally, there was slightly more complex analysis in the higher educated group, perhaps because they are better read on issues, and the lower income group participants occasionally referred to personal costs associated with a crisis situation.

Age

The literature (e.g., Knight et al., 1985) led me to expect lower reported anger with greater age. The analysis of high age/low age paired groups indicated some decline in the number of anger responses in the older age group (FG1) compared with the younger age group (FG5). However, a search through higher emotional intensity phrases found both groups had a similar propensity to articulate strong sentiments.

The higher age group reported no boycott or avoidance behaviour, in contrast with the lower age group who reported both activities, especially boycott, with individuals boycotting up to three companies each (see Appendix 4.15). However, this reporting level may have resulted from peer influence, as some participants initially took the high moral ground, then later owned up to other reasons. For example, two participants in the lower age group (FG5M1, FG5M2) initially indicated that they did not buy Nike because of its sweat shop policies, e.g., FG5M2 said, “... I won’t buy Nike products – there’s the ethical implications...”. However, a little later when pressed by the moderator, he admitted it was for
other reasons. FG5M2 said, “...yeah but I’d never buy anyway...because it’s just not my kind of thing.” The younger cohort, predominantly university students, was the only group to raise ethical concerns in crises, which may indicate that they are more concerned with ethical implications, or this may be due to university teachings. Despite this, the younger group held managers less accountable for their actions than did those in the older age cohort, e.g., FG5F1 said, “…company directors, they were held responsible, but sometimes things just happen and they can’t be everywhere … sometimes it’s not necessarily their fault”. In contrast, older participants had a view of companies as uncaring, e.g., FG1M2 said, “They’re not worried about the public....they’re only worried about their shareholders…”.

Culture

Although the literature (e.g., Lee et al., 1996; Markus & Kitayama, 1991) indicated that culture impacted both an individual’s experience of anger and attribution style, a comparison of the individualist (FG7) and collectivist (FG8) groups revealed few differences, except for some concern among the collectivists over lack of understanding of crisis announcements due to poor English.

Negative affectivity

AET argued for the importance of trait Negative Affectivity (NA) in predicting emotional reactions to events (Weiss & Cropanzano, 1996), arguing that high NA individuals react more strongly to negative events than low NA individuals. As almost 40% of the sample (20 participants) engaged in boycott/aversion actions, this may indicate either that strong reactions are common - or this may be a function of the self-selecting sample.

Summary

This study was the first of its kind to investigate the range of emotions, behaviour and attitudes that crises elicit in consumers, as well as factors that consumers themselves consider important in a crisis, providing valuable insight into consumers’ thoughts, feelings and actions. Results from eight focus groups confirmed that the main variables identified in the literature influenced crisis outcome for participants. Congruent with Miles and Huberman’s (1984) recommendations, this provided evidence of the plausibility, sturdiness and confirmability of these variables and justified their selection for further testing.

In sum, participants had diverse reactions to crises. Participants made it clear that defining an event as a crisis depended upon their level of involvement, that is, whether the crisis impacted either them personally, the wider community, or their beliefs and values
(including ethical values). This is congruent with the involvement definition encompassing concerns, values, needs, interests, goals and beliefs. Fresh media reports may stimulate further consumer reactions, congruent with Weinberger and Romeo’s (1989) investigation of negative publicity effects for the Ford Pinto, where each fresh media report was associated with diminishing market share. Although no strong association was found between involvement and intensity of emotions, no specific involvement information was sought.

Those held responsible or seen as contributing to the crisis had negative emotions and behaviours directed at them. No crisis was exempt from strong emotional reactions. Crises evoked more than 80 discrete emotions across all six emotion categories (predominantly anger and fear, then sadness, joy, surprise and love), providing a wider emotional lexicon for crises than previously available. Both language and intonation indicated that participants did not just recall emotions, but re-experienced them when reminded of crises. This is congruent with the James-Lange (1890, in Levine, Prohaska, Burgess, Rice, & Laulhere, 2001) theory of emotion which argued that emotion could be triggered as easily by memory of the event as by its direct perception.

Congruent with AET’s contention of emotion-driven behaviour, using Folkman and Lazarus’ (1988) categories, nine main behaviour groupings were identified, as well as practical coping behaviour. However, no conclusive emotion-behaviour groupings occurred, except for boycotts, which were tied to anger, and avoidant actions, which were tied to fear, with some behaviours reported as continuing.

Congruent with findings from empirical studies earlier examined, attributions that the crisis cause was internal to, and controllable by, the company evoked company-directed anger and judgments of responsibility. Where the cause was attributed to external/uncontrollable sources, those sources had anger directed at them. The ambiguous crisis engendered fear and anger, not predominantly anger as predicted. Differing attributions made about the Ansett safety crisis also highlighted the necessity of company monitoring of consumer crisis perceptions. Companies may find some comfort that crises not considered important (i.e., not life threatening) by consumers (such as the McDonald’s game crisis), or where a company is clearly not at fault, such as the paracetamol crises, may generate little consumer ire and negative behaviour.
A solid company reputation did not completely provide a protective effect in a crisis, especially when the company was considered to be at fault, as seen in the Ansett airline crisis. One implication is that a crisis may severely damage companies with strong reputations.

Some companies used accounts that shifted crisis blame to other companies or to other people. While this was perceived as a common company strategy, it generated hostility towards the company delivering the account. Additionally, when other crisis messages, such as that delivered by the Ansett CEO, were perceived as lies, anger resulted and negative character attributions were made about company management. Such dispositional attributions reveal strong negative attitudes towards these companies caught lying and contribute to the public’s lack of trust in the integrity of organisations.

While a number of demographic factors were expected to impact crisis outcome, only an age bias appeared. The higher age group reported no boycott and avoidance behaviour, in contrast with the lower age group who reported both activities, especially boycott. This may suggest that for crises affecting products with a younger targeted demographic, stronger boycott action possibly may be expected. Additionally, participants (except for the younger cohort) held management primarily accountable for the crises, especially when the crisis cause was considered to result from safety problems due to cost cutting.

Some proposed constructs received little or no discussion. Accounts were mentioned in several crises, but were not heavily discussed. Additionally, although there was some mention of accountability of company management, content analysis revealed that the constructs of foreseeability and intentionality were not discussed, which may mean that these are not considered important in company crises.

A number of new crisis variables emerged. Although negative pre-existing attitudes existed towards big business, positive attitudes to companies emerged, particularly when companies were considered to have correctly handled the crisis. Competent crisis management, by publicising procedures designed to safeguard consumers, can engender positive feelings towards the company, as demonstrated by the Panadol recall. For these companies, recuperative advertising campaigns were positively viewed, with the opposite effect for those deemed to have handled the crisis badly. In this type of crisis, advertising may be best kept to reporting procedures used to safeguard consumers. An implication for companies is that when a crisis is perceived to be caused by cost cutting, money spent on advertising campaigns may be considered to be an inappropriate use of funds. Managers also
received blame for refusing to take responsibility for outcomes of their actions. Negative attitudes to government highlighted the fact that continuing deregulation affecting safety procedures and selling off public utilities means that consumers may direct anger at government and government bodies during an organisational crisis involving safety failure. Media were considered to play a role in “beating up” stories in the interests of making news, not just reporting it. However, these variables, while of interest, will not form part of the main testing model for reasons of parsimony.

**Issues of Reliability, Validity and Rigour**

In qualitative research, data reliability can only be judged by reference to the contextual variables or conditions that surround data collection (Kirk & Miller, 1986). As the researcher must document procedure, particularly the way in which data are collected and analysed to demonstrate reliability (Kirk & Miller, 1986), issues of reliability were handled by explaining each step of the data collection and analysis, thereby leaving an audit trail. Additionally, reliability and validity were strengthened by ensuring that the data record distinguished between the verbatim verbal exchanges of the people observed. To ensure this, sessions were videotaped and carefully transcribed, using the procedure described earlier in this chapter.

Validity refers to the truth or accuracy of a researcher’s accounts, that is, the extent to which the account accurately represents those features of the phenomenon that it is intended to describe, explain or theorise (Hammersley, 1993). As validity in qualitative research is best demonstrated by careful documentation of the analytical procedure (Miles & Huberman, 1984) and by providing adequate evidence to support knowledge claims (Hammersley, 1992), the analysis made extensive use of tabulated data, with percentages given where possible to provide evidence backing up the validity of findings and conclusions.

Rigour was accounted for by acknowledging the perspective of the researcher, addressing the above issues in reliability and validity, and creating an audit trail documenting decisions, choices and insights.

**Limitations**

This study has several limitations. First, it is exploratory in nature with a small sample size, which means that data are context-bound and not generalisable. In non-probability sampling, it is not possible to estimate sampling errors, therefore the validity of inferences to a population cannot be made (Pedahur & Schmelkin, 1991). In addition, there are a number of
limitations in regards to the sample. The self-selecting nature of the sample means there may have been some demand characteristics - i.e. participants recruited may have experienced, and therefore reported, particularly strong emotions and behaviour (hence the large proportion of boycotters). This bias may occurred for two reasons. The first is that the wording in the media call for volunteers and in the posted out explanatory statement requested a discussion about thoughts and feelings regarding crises, thus participants may have felt they were expected to demonstrate strong emotions. In addition, the study may have attracted participants who had been more strongly impacted by crises than the general population, introducing a bias. All participants except one had been directly impacted by the Esso gas crisis in which Melbourne had lost access to gas for cooking and hot water for several weeks. Participants also included a Legionella sufferer impacted by the Melbourne Aquarium crisis, as well as others who visited the Aquarium during the infection period, and those who had lost money in the HIH collapse. Another limitation is that there may have been a “cohort effect.” This refers to a change in the dependent variable because members of one group experienced different historical conditions to another groups (Zikmund, 1997). The older cohort’s stronger negative view of corporations and their managers, in comparison to the younger age cohort, may have been due to their familiarity with multiple Australian and international corporate collapses over past years. In addition, the very fact that participants were recruited mainly via the media may mean that participants were more avid consumers of media stories than the general population sample and therefore had a higher awareness of company crises than the general population. This may have affected their responses.

Other limitations stem from the focus group procedure. There is the issue that a ‘phenomenological attitude’ - wanting to find out about the subjective world of others - was embedded in a positivist paradigm (Cunningham-Burley & Davis, 1999). The way around this is to observe a ‘methodological integrity’, with researchers acknowledging the complexity of the subjective world, including critically reflecting on the researcher’s subjectivity (Cunningham-Burley & Davis, 1999). While I had preconceived ideas about likely themes and associations that would emerge from the data, I found that not all of these emerged.

Additionally, there is the issue of internal consistency. Some participants did change their position after interacting with others. In a similar vein, there appeared to be some emotional contagion, that is, consumers “catching” emotions from others, in some exchanges. This, as well as an attempt at coercion, occurred. Additionally, some empiricists question the validity of recalled emotions, suggesting that these may be reconstructed, rather than recalled.
However, as the James-Lange (1890, in Levine et al., 2001) theory noted, emotion can be triggered as easily by memory of an event as by its direct perception.

Greenbaum (1998) warned against quantifying results from focus groups. While I have quantified some results (e.g., for emotion), the rationale was to generate understanding of the degree to which participants were in accord, and not in order to allow generalisations. While Greenbaum (1998) also suggested not placing too much emphasis on comments made by individuals, I have used participants’ comments to illustrate typical thoughts.

While I have stated that crises elicit a range of emotions from consumers and that each may have different behavioural outcomes, the determination of relationships between variables is best left to an experimental methodology.

**Impact on the Hypotheses**

Findings from Study 1 indicate that variables identified in the development of the hypotheses appears to be fairly robust, although company accounts were not frequently recalled by participants, which may indicate that they play a minor role in consumer reactions in contrast to crisis types, as indicated by Jorgensen (1996). However, as accounts are the only tool under company control at the crisis outbreak that may positively affect outcome, one main purpose of the research is to test how the full range of accounts impact consumer reactions. While the literature identified five possible causal attributions, reflecting the causal conditions (actual crisis types), here only three appeared - internal/controllable, external/uncontrollable and ambiguous. This may indicate that these are the main crisis types that erupt. Alternatively, they may reflect a bias in my interpretation of these crises from consumer reports. While new variables were ascertained, specifically dispositional attributions and a range of attitudes to those external to the company, for reasons of parsimony, these will not be tested.

**Further Emotion Research**

While it was anticipated that specific emotion-behaviour links would be identified in the focus groups, inconsistencies in findings demonstrated how little is known about emotions as drivers of behaviour. Study 2 will therefore use an experimental methodology to test relationships.
The adequacy and need for lists of basic emotions has been debated (Fisher, 1997). Generic emotion lists like that of Shaver et al. (1987), while capturing a broad range of commonly experienced emotions, have limited practical usage due to their bulk. Moreover, affect scale development highlights the fact that the range of emotions people experience is situationally dependent. Emotions reported in the workplace identified by Fisher (1997) differ substantially from the affect range experienced by advertising viewers (Batra & Ray, 1986) or by consumers during the consumption experience (Richins, 1997). This study provided an inventory of consumer emotions experienced during crises, which may be used to develop a crisis-relevant emotion scale. This would provide a tool for managers and scholars to check the emotional pulse of consumers during a crisis, identifying how emotive a crisis issue is and pinpointing when crisis management techniques are failing. This study demonstrated that the study of emotions evoked by organisational crises is a moral and business imperative. It highlighted the need for further research and development of a more complete taxonomy of commonly used emotion words.
CHAPTER 5 – DEVELOPING THE MEASURING INSTRUMENT

Chapter Outline

This chapter provides the rationale and background to developing the data collection instrument to test the research design and hypotheses in Studies 2 and 3. In this chapter, I first discuss the procedures involved in operationalising the independent variables, crisis causes and company accounts, through developing news stories using a plane crash and the company’s communicated response to that crash. I provide justifications for vignette use. Following this, I discuss the pre-testing involved in refinement of the scenarios and the questionnaire using convenience samples, before finalising the collection instrument. Next, I discuss the process involved in selecting the instruments for measuring the dependent variables. I then discuss and justify each scale, and, where no suitable scales existed, describe scale development. Finally, I discuss some instrument limitations.

Background to Developing the Crisis Scenarios

To test the independent variables, Crisis types and company Accounts, and their impact on the dependent variables, it was necessary to operationalise both the two crisis causes and the company accounts by creating scenarios. Use of created vignettes or scenarios to systematically manipulate relevant appraisal dimensions has a substantial history in the social sciences. Additionally, they have been used in crisis research, e.g., in studies by Griffin et al. (1991), Jorgensen (1994, 1996) and Kaman Lee (2004).

A potential drawback to vignette use is the highly mediated response: participants have to imagine being in the situation and responding to it (Lee et al., 1996). Additionally, attributions made by participants are not meaningful outside the laboratory (Lee et al., 1996). For emotion research, this approach has relatively low ecological validity in being too far removed from actual emotional responses to experienced events (Scherer & Ceschi, 1997). However, vignettes provide systematic information that cannot otherwise be obtained. This technique allows an experimenter to present participants with the same situational scenario, and to consistently vary different aspects of the situation. Experiments in social psychology frequently make use of vignettes for a systematic manipulation of constructs, allowing greater internal validity.
Scenario Development

As variables of involvement, attributions, judgments of responsibility, accountability, emotions, behaviours and attitude were to be tested, there were several requirements. First, as Study 2 used a student sample and Study 3 a general population sample, the scenario required a product or service used by participants or their family and friends. It was also necessary that the crisis could potentially affect a large number of customers.

A plane crash scenario had been successfully used in crisis research by Jorgensen (1994, 1996) and Kaman Lee (2004), with the latter author noting that, in a pre-test, a sample of Hong Kong residents regarded a plane crash as the most serious type of crisis relative to two other crises (product tampering and employee strikes). As a plane crash scenario suited the requirements of the study, this was selected. To aid realism, the crisis was presented as an actual situation that had occurred recently. To create involvement, as the participants in Study 2 and Study 3 had Brisbane as their major local airport, the plane crash was set in Brisbane, Australia.

Justification for Using a Print News Story

Research has found inconsistent results on the extent that choice of medium (print, TV, radio) affects conveyed messages. Dommermuth (1974) found that audiences perceived a print presentation as better, fairer and stronger than radio or TV (in Jolly & Mowen, 1985). A product recall study by Jolly and Mowen (1985) found that when information was presented in the form of a government press release, the print medium (newspaper) form of information was viewed as more trustworthy and marginally more objective than using a tape (radio) medium. Jorgensen (1994, 1996) and Kaman Lee (2004) also used mock newspaper stories in their crisis vignettes. Therefore, simulated newspaper stories were used in the operationalisation of different crisis types and company accounts.

For purposes of realism, congruent with reported newspaper air crash stories, the crash stories were created in front-page news story format, using the design style and fonts currently used by a popular local daily newspaper, listing current newspaper pricing, and professionally written in newspaper style, adjusted for the constraints of the manipulations. Both text and pictorial components were used. Selection of a suitable plane crash photograph proved challenging as the crash had to involve a design of plane still in service in Australia, the photograph had to suit various crisis causes and, as harm level was held constant, had to suit a medium harm level (see Appendix 5.1 for one example of a photograph tested).
For the purpose of the scenario, the name selected for the airline company was “Domestic Airlines” (DA), chosen to avoid bias via similarities with names of current Australian airlines, while still implying this was a local domestic airline. The stories were dated a week after the crash when preliminary crash findings may be expected. To add to realism, as Australia has a government body charged with investigating civil aviation accidents (The Australian Transport Safety Bureau), a mock investigating body, the National Accident Investigating Authority (NAIA), was created to investigate the mock crash. To add authority to the statement about crisis cause, the designated spokesperson used in the crash story was said to be the NAIA’s Chief Investigator, Chris Jones. Likewise, in the stories delivering the company account, the Chief Executive Officer (CEO) of the airline company, Pat Carney, was chosen as its spokesperson to add authority and credibility to the message. For both spokespeople, an androgynous name was selected to reduce gender bias, with the surname non-descript, not associated with a well-known Australian figure, and Anglo-Saxon in origin to reflect the Australian population majority. Participants were requested to assume that the story was printed in a fictitious Australian newspaper with a generic-style name, The Sunday News, which, to add to the credibility of the news report, they were to assume was a reliable and reputable newspaper.

**Operationalising Independent Variables**

The independent variables for Studies 2 and 3, crisis causes and accounts, were operationalised in separate news stories so that participants saw one front-page news story reporting preliminary crash findings, plus a separate follow-up story containing the company account.

As argued in Chapter 2, the crisis causes were based on two factors, locus (internal/external) and controllability (controllable/ambiguous/uncontrollable), while there were five accounts (no comment, denial, excuse, justification, confession). These were operationalised for testing in a 2 (locus) x 3 (controllability) x 5 (account) design, resulting in a total of 30 different scenario versions.

**Operationalising Crisis Causes**

To add to the realism of the various causes of the plane crash, investigation was made into numerous past plane crashes in order to select both likely and believable causes. Multiple causes were trialled on convenience samples of friends and colleagues for face validity, until an array of likely combinations of locus and controllability were developed. These were then pre-trialled in order to ensure that participants separated both the two locus causes
(internal/external) and the three controllability causes (controllable/ambiguous/uncontrollable). Final operationalisation of crisis causes is given in Table 13, after the discussion of pre-testing techniques.

**Operationalising Accounts**

Five account strategies (no comment, denial, excuse, justification, confession) were operationalised. This involved using the account strategies discussed in Chapter 2, with guidelines for exact wording based on a review of accounts commonly given in news stories. A “no comment” response was selected; for “denial”, denial of responsibility by indicating that the event was caused by circumstances not under the company’s control (Schlenker, 1980) was used; for “excuse”, as one version of this account is the attempt to minimise responsibility by locating blame elsewhere (Schlenker, 1980), including “scapegoating”, this account version was selected; of the three types of “justifications”, the attempt to minimise the undesirable nature of the event (Schlenker, 1980) by stating that the event’s consequences weren’t really all that bad, was used; for “confession”, the full 5-component “confession” containing apology, admission of responsibility, restitution, self-castigation and a promise of future acceptable conduct was selected. Exact wording of the final adjusted accounts is given later in Table 14.

**Pre-testing**

As each crisis type needed to unambiguously fit into the cells of perceived locus and controllability, the event vignettes required pre-testing. There were three pre-tests which involved substantial iterations, testing both the scenarios and the questionnaire prior to testing on the large student population sample in Study 2.

**Pre-test 1: crisis causes.**

Using a convenience sample of 23 people (family and friends) in a within-subjects design, I tested the plane crash photo (see Appendix 5.1), harm level and all crisis causes.

The photograph proved unsuitable as one participant identified that the plane was not a 737 (a common Australian domestic aircraft). In this scenario, I had set the number of dead at 53, with 24 seriously injured and 62 survivors. Participants considered this to be a very high injury level, indicating that the death toll needed revising down to a medium level, as it was not intended to manipulate harm. To determine whether the scenario described for each crisis fell unambiguously within the intended cells for locus and controllability, I tested these against a manipulation check. However, results indicated that participants had difficulty with
locus, that is, separating the internal from the external crisis causes, and these were subsequently re-worked. There was no problem with controllability.

**Pre-test 2: Crisis causes and accounts.**

After adjusting the crisis causes, an expert panel of 13 academics and PhD students in a within-subjects design rated each crisis cause for perceived locus (internal/external) and controllability (controllable/ambiguous/uncontrollable) against a manipulation check. Results improved from the earlier test, but fine-tuning was still required. Feedback suggested that the independent variables needed to be highlighted in the newspaper heading, not just in the body of the story. The account stories were also adjusted so that each account was provided in the heading. From the new photo of a 737 crash (see Appendix 5.2), panel members were asked to estimate the likely number killed in the crash and the level of the death toll. From these results, the death toll was set at 33, which participants considered moderate. Solicited feedback indicated that the story and accompanying photograph were believed to apply to the crash of a domestic airliner in Brisbane. As it had been predicted that high involvement determined emotional reaction, a check on involvement levels was also conducted with the finding that involvement with the crisis was medium to high, which was satisfactory.

For the final version of the crisis causes used in Study 2 see Table 13. To see an example of how the final crisis cause appeared in the news stories appeared in the questionnaire, please refer to Appendix 5.2. For the final version of the accounts used in Study 2 see Table 14. To view an example of how the final account stories appeared in the questionnaire, please refer to Appendix 5.3.
<table>
<thead>
<tr>
<th>Crisis types</th>
<th>Headline</th>
<th>Body copy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal and controllable</td>
<td>Airline’s neglected engine service caused air tragedy</td>
<td>The National Accident Investigating Authority’s Chief Investigator, Chris Jones, said that Domestic Airlines’ records showed it had failed to carry out an important engine safety service for that particular plane. Jones said the company had slashed numbers of maintenance crew in the previous six months as a cost-cutting measure.</td>
</tr>
<tr>
<td>Internal and uncontrollable</td>
<td>Airline maintenance crew sabotage caused air tragedy</td>
<td>The National Accident Investigating Authority’s Chief Investigator, Chris Jones, said that police are expected to lay charges later today against a Domestic Airlines’ employee currently held for questioning. Jones said that last year Domestic Airlines had substantially stepped up all security measures, including police reviews of all existing personnel.</td>
</tr>
<tr>
<td>Internal and ambiguous</td>
<td>Botched engine service caused air tragedy – sabotage or accident?</td>
<td>The National Accident Investigating Authority’s Chief Investigator, Chris Jones, said that a Domestic Airlines’ maintenance crew member is currently under police investigation. Jones said that, at this stage, it is unclear whether the maintenance error was intentional sabotage or a genuine mistake.</td>
</tr>
<tr>
<td>External and controllable</td>
<td>Bird strike caused air tragedy – safety device not yet installed</td>
<td>The National Accident Investigating Authority’s Chief Investigator, Chris Jones, said that shortly after take-off, the plane hit a large flock of birds, causing the engine to fail. Jones said Domestic Airlines had recently purchased some hi-tech equipment to protect engines from this particular hazard, but it had not yet been installed.</td>
</tr>
<tr>
<td>External and uncontrollable</td>
<td>Terrorist sabotage caused air tragedy despite high security</td>
<td>The National Accident Investigating Authority’s Chief Investigator, Chris Jones, said that a terrorist organisation had claimed responsibility for sabotaging the flight, supplying confidential details. Jones said that Domestic Airlines had, due to recent terrorist activity, extensively reviewed and substantially tightened all security procedures.</td>
</tr>
<tr>
<td>External and ambiguous</td>
<td>Terrorist sabotage, company security gap caused air tragedy</td>
<td>The National Accident Investigating Authority’s Chief Investigator, Chris Jones, said that a terrorist organisation had claimed responsibility for sabotaging the flight, supplying confidential details. Jones said that an examination of full company security measures revealed weak spots in the company’s security, thought to have been exploited by the terrorist organisation.</td>
</tr>
<tr>
<td>Independent Variable</td>
<td>Operationalisation</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td>No Comment</td>
<td>Domestic Airlines’ Chief Executive Officer, Pat Carney, was approached for comment on the preliminary findings on the cause of the company’s 737 crash last Monday. “I have no comment to make”, Carney said.</td>
<td></td>
</tr>
<tr>
<td>Denial</td>
<td>Domestic Airlines’ Chief Executive Officer, Pat Carney, has commented on the preliminary findings on the cause of the company’s 737 crash last Monday. “The crash was caused by some factors outside Domestic Airlines’ control. It is not the fault or responsibility of Domestic Airlines”, Carney said.</td>
<td></td>
</tr>
<tr>
<td>Excuse</td>
<td>Domestic Airlines’ Chief Executive Officer, Pat Carney, has commented on the preliminary findings on the cause of the company’s 737 crash last Monday. “We have experienced on-going problems with the maintenance crew’s union for some time, which affected maintenance schedules. The union must accept responsibility for any problem that occurred with that engine”, Carney said.</td>
<td></td>
</tr>
<tr>
<td>Justification</td>
<td>Domestic Airlines’ Chief Executive Officer, Pat Carney, has commented on the preliminary findings on the cause of the company’s 737 crash last Monday. “This sort of thing is bound to happen to all airlines at some time. It was very fortunate that so many passengers and crew were unharmed”, Carney said.</td>
<td></td>
</tr>
<tr>
<td>Confession</td>
<td>Domestic Airlines’ Chief Executive Officer, Pat Carney, has commented on the preliminary findings on the cause of the company’s 737 crash last Monday. “We accept full responsibility for the crash. We at Domestic Airlines are very sorry and express our deeply felt apology and sympathy to the victims and families. It was something that should never have been allowed to have happened. We will do all we can to compensate those affected. We will take all action necessary to ensure something like this never happens again”, Carney said.</td>
<td></td>
</tr>
</tbody>
</table>
Pre-test 3 – Testing the full questionnaire to identify problems with scales.

While scale development has yet to be discussed, following on from the previous two pre-tests, it is timely to mention that the final step in the questionnaire design involved a full pre-test of the questionnaire with all the embedded news stories in order to identify problem areas. I used a convenience sample of 19 previously untested participants in a between-subjects design, soliciting feedback either in writing or in follow-up interviews. A number of small problems with questions were identified and corrected. For example, one reversed statement on the mood scale was commonly misread as though it was positively stated; another thought that an item on the involvement scale (“exciting”) was offensive in a plane crash context, so it was replaced; some words in the attribution and behaviour scales were adjusted. Many participants reported problems answering questions using semantic differential scales, so a clear set of instructions were written and then checked with additional participants.

Measuring the Dependent Variables

This section describes the justification for scale selection, adjusting existing scales, or developing a new scale.

The questionnaire used self-report measures, making the problem of common method variance more likely. According to Williams, Cote, and Buckley (1989), items intended to measure different, but related, constructs that have similar content and identical scale response formats cause spurious correlations to some degree (in Gardner, Cummings, Dunham, & Pierce, 1998). However, because two different types of scaling (Likert, and semantic differential) were used throughout the questionnaire, this was less likely to occur. A new scaling format can interrupt participants’ routinized responding by requiring them to think carefully about what is being asked of them (Gardner et al., 1998). All scales were tested in Studies 2 and 3 for reliability and validity, adjustments were made, with the scale further tested using confirmatory factor analysis in Study 3 to assess convergent and discriminant validity.

Dependent variables that were measured were involvement, attributions of locus and controllability, as well as intentionality and foreseeability, accountability, responsibility, emotions, behavioural intents and attitude. Additionally, as AET proposed that affective predispositions of mood and negative affectivity influenced attributions and emotions, measures for these were located. Demographic variables of age, gender, income, education and culture, found to influence emotions and behaviour, were measured. Additionally,
manipulation checks were developed for crisis causes, to check perceived harm level and degree of realism and believability of the scenario. As well, as studies indicated that product usage levels and company reputation affect outcomes, methods of control for these variables are discussed later in this chapter.

Involvement Measures

Earlier in Chapter 2, an argument was made for Celsi and Olson’s (1988) conceptualisation of involvement, with involvement having two sources: intrinsic sources of personal relevance (ISPR), which are triggered by situational sources of personal relevance (SSPR), such as repeated media stories about the crisis. SSPR, while identified in Study 1 in the form of reminder cues, cannot be tested in an experimental design. For ISPR, the argument was made for involvement using Zaichkowsky’s (1985) definition encompassing needs, values, and interest, AET’s (1996) and Celsi and Olson’s (1988) use of goals, and Frijda’s (1996) use of concerns.

Measurement Tool


Scales exist to measure involvement with fashion, automobiles, products, advertising, purchasing and purchasing decisions, education and politics. No single scale can measure all kinds of involvement (Day, Stafford, & Camacho, 1995). As no scale exists that is suited to measuring involvement with crises, in this section I argue for the development of a scale based on those by Zaichkowsky’s (1985) and McQuarrie and Munson’s (1992) later revision (see Appendix 5.4 for a comparison of both), with the addition of two items from Faber, Tims, and Schmitt’s (1993) political involvement scale.

In evaluating involvement measures, Goldsmith and Emmert (1991) found that Laurent and Kapferer’s (1985) scale had validity but lower internal consistency than Zaichkowsky’s (1985) Personal Involvement Inventory (PII) which performed well across all tests (in McColl-Kennedy & Fetter, 1999). However, Mittal (1989) noted that Laurent and Kapferer’s
(1985) definition and 4-dimensional measure incorporated constructs that were antecedent to involvement (in McColl-Kennedy & Fetter, 1999).

Zaichkowsky (1985) checked the reliability of her PII on two subject populations for an average test-retest correlation of a coefficient alpha of .90. The scales had criterion-related validity and construct validity (Zaichkowsky, 1985). With a potential score ranging from 20 to 140, the theoretical PII mean is 80. High involvement therefore refers to scores in the top quartile of distribution, with low involvement referring to scores in the first quartile. McQuarrie and Munson (1992) also found the PII exceedingly reliable (coefficient alpha of .98), highly predictive of a broad range of behavioural outcomes associated with involvement, and able to successfully discriminate felt involvement across several products and a variety of situations.

However, McQuarrie and Munson (1992) argued that Zaichkowsky’s (1985) 20-item measure was unwieldy to use and its language level was too high. Their 10-item Revised Involvement Inventory (RPII) pared down the PII and added two terms “dull-neat” (a term suited to USA usage) and “fun-not fun”. Tests of their 10-item scale on various products alongside Zaichkowsky’s (1985) PII indicated that the RPII was almost as reliable (coefficient alpha of .95) and similar in criterion validity, but half as long and more comprehensible. McQuarrie and Munson (1992) found that the scales were two dimensional, loading on factors of interest and importance.

McColl-Kennedy, Fetter, and Dahringer (1995) assessed the construct validity of the RPII across a variety of services using a 9-item version of the RPII (removing fun-not fun), reporting that the RPII was indeed two-dimensional (in McColl-Kennedy & Fetter, 2001). In further testing on services, McColl-Kennedy and Fetter (2001) again found that the items loaded strongly on their intended factors and had good internal consistency (coefficient alpha of .73 to .90).

As the PII and the RPII were designed for measuring product involvement, while McColl-Kennedy et al.’s scales (1995, 2001) measured service involvement, not all terms were appropriate for measuring crisis involvement. Specifically, the RPII’s paired terms of “dull-neat” and “fun-not fun” were not suitable for measuring crisis involvement, while certain PII terms such as “appealing-unappealing, wanted-unwanted, needed-not needed” are also unsuitable. As noted earlier “exciting-unexciting” was considered offensive when applied to a plane crash. It is therefore argued that an adjusted version of the PII/RPII scale was required to measure crisis involvement.
**Developing the Crisis Involvement Inventory (CII)**

To form a Crisis Involvement Inventory (CII) based on the RPII’s two-factor construct of importance and interest, I used both the PII and the RPII scales. I removed RPII’s four interest terms of “dull-neat”, “fun-not fun”, “appealing-unappealing” and “exciting-unexciting” as inappropriate for crisis research, then added back in PII’s interest terms “interesting-uninteresting” and “significant-insignificant”. To keep this scale in line with the RPII’s 10-item scale, this still left two interest terms short.

Two interest terms that Faber et al. (1993) used in developing their political involvement scale referred to attention (an interest term). Specifically, the authors asked, “Is news about politics something you try to pay attention to, or is it something you just happen to learn about because it is in the media?” And, “Is politics something you like to talk about or do you only discuss it if someone else brings it up?” Congruent with Faber et al. (1993), I used attention to a crisis, specifically “would pay attention to – would not pay attention to” and “worth discussing with others – not worth discussing with others”. For the final version of the scale, see Appendix 5.5. The scale was tested in Studies 2 and 3 for reliability and validity, and by using confirmatory factor analysis in Study 3.

**Manipulation Check for Crisis Cause**

Jorgensen (1996) manipulated different crisis causes, gauging the success of the manipulation using 1-item attribution manipulation checks for locus, controllability and stability. In their review of the attributions measure, Kent and Martinko (1995) noted that, as there are an almost limitless number of attributions for an event, researcher error could be reduced by focusing on assessing the underlying causal dimensions of an event. As a result, my manipulation check for crisis cause used Jorgensen’s (1996) items for locus and controllability (see Appendix 5.6) as these focused on underlying crisis causal dimensions. However, stability was not tested as the argument had been previously made in Chapter 2 that stability is not a feature of crises. Additionally, Jorgensen (1996) found that no manipulated variables significantly affected his measured stability item. This manipulation check was presented after the crisis cause was given in the main news story.
Measure for Causal Attributions

As Weiner et al. (1991) found that accounts may cause an attribution shift, a further attribution measure was presented after the second news story, which contained the account. To avoid test-retest problems, a different attribution scale was selected.

Two attribution measures often used are the Causal Dimension Scale (CDS) by Russell (1982), and the Revised Causal Dimension Scale (CDS11) by McAuley, Duncan, and Russell (1992). Using a 9-point semantic differential scale, each scale measured the three most theoretically accepted causal dimensions, locus of causality (internal/external), controllability and stability.

Russell’s (1982) Causal Dimension Scale (CDS) was designed to overcome the problems inherent in traditional approaches to attribution measurement. Crisis and failure researchers (e.g., Jorgensen, 1994, 1996) used items modified from the CDS as a manipulation check. However, a number of researchers, notably McAuley et al. (1992) have raised concerns about the low internal consistency of the control dimension and its propensity to correlate highly with the locus of causality dimension.

McAuley et al. (1992) devised and tested the Revised Causal Dimension Scale (CDS11 - see Appendix 5.7), which differentiated control in terms of whether the cause is (a) controllable or uncontrollable by the person and (b) controllable or uncontrollable by other people. Causal perceptions were assessed on four subscales – locus of causality (internal/external), personal (internal) control, external control, and stability. When tested over four studies, the CDS11 had average internal consistencies of coefficient alpha .67 for locus of causality, coefficient alpha .67 for stability, alpha .79 for personal control, and coefficient alpha .82 for external control. The authors applied the goodness-of-fit index (Jöreskog & Sörbom, 1989) to individual items to establish their loadings on the four factors. Loadings on each factor were, for Locus of Causality .55 to .75, Stability .58 to .70, Personal Control .71 to .74 and External Control .69 to .82 (Kelly & Campbell, 1997). The loadings were significant and explained 31% to 67% of response variance. Results showed that locus of causality and controllability were empirically distinct.

To measure attributions about the crisis cause, the CDS11 was used, although stability was not measured because, as argued in Chapter 2, this dimension was not suitable to apply to crises. The semantic differential scale was adapted for use with crises. This involved changing some terms to suit the company situation (see final scale in Appendix 5.8): Item 3,
“something you can regulate” has been changed to “something the company could have prevented” as regulate, in company terms, refers to rules, whereas the meaning here is influence; “Others”, while clear interpersonally, has also been changed to “other companies or people outside the company”, while in one case, “external situations” was included. Congruent with other scales used, the scale is standardised to a 7-point format with lower readings starting on the left.

As this was the main test for attributions, this semantic differential scale was positioned in the questionnaire after the company account so as to investigate potential attribution shifts.

*Measuring Attributions of Foreseeability and Intentionality, and Accountability*

In Chapter 2, an argument was made for the importance of attributions of foreseeability and intentionality, as well as for accountability in company crisis situations.

No tested measures were located that were suitable to measure intentionality and foreseeability within a company context. Therefore, in line with researchers such as Weinberger et al. (1981), who used a single-item global measure of attitude (opinion), these constructs were operationalised as 1-item measures (see Appendix 5.9).

Klimoski (1992 in Pawlson & O’Kane, 2002) and Frink and Ferris (1998) developed scales to measure how accountable an individual perceived themselves to be in the workplace. Klimoski’s (1992 in Pawlson & O’Kane, 2002) Accountability to Co-workers Scale was adapted by Thoms, Dose and Scott (2002) to form the Accountability to Management Scale. However all three scales were restricted to testing job performance accountability and were not suitable for adapting to measure company accountability. In line with foreseeability and intentionality, accountability was therefore operationalised as a 1-item measure (see Appendix 5.9).

*Measuring Responsibility*

Several scales were identified that measured responsibility. These are reviewed below and justification given for selecting the scale by Karuza, Zevon, Gleason, Karuza, and Nash (1990).

To measure responsibility, Miller and Sigman (1994) developed the Attributions of Responsibility Questionnaire (ARQ) (in Miller, Hyung-Sung, & Seligman, 1999). However, the focus of the ARQ is on responsibility for personal improvement and therefore was not
suitable here. Wood and Mitchell (1981) used a 1-item measure of attribution of responsibility, however, as no test-retest reliabilities were listed, this was also discarded.

Jorgensen (1996) used a 3-item, 7-point scale to measure crisis responsibility, asking for degree of company responsibility on three semantic differential measures: “not at all responsible – very responsible”, “very controllable – not at all controllable”, “very much to blame – not at all to blame”, which had a coefficient alpha of .87. However, as Weiner (1995b) contended that blame was a combination of responsibility and anger, and as there was the potential to confound responsibility with anger, this was not used.

Karuza et al. (1990) tested personal attributions of responsibility for a problem using a 3-item, 7-point unipolar scale, finding it internally consistent and reliable (coefficient alpha .80). This was similar to Jorgensen’s (1996) scale although, instead of blame, it used problem avoidance. In testing their adaptation of Karuza et al.’s (1990) scale, Hayes and Wall (1998) found that coefficient alpha values for the cause scale ranged from .70 to .88 (McCacken, Hayes, & Dell, 1997), while Bailey and Hayes (1996) found that for test-retest intervals of one, two, three and four weeks, reliability ranged from .82 to .90. Additionally Karuza et al. (1990), Hayes and Wall (1998) and Bailey and Hayes (1996) provided evidence of concurrent and construct validity for the cause items. This scale was selected for use, with the pronoun “you” replaced with “the company” – see Appendix 5.10.

Measuring Emotions

Emotions can be measured in three ways: by physiological reactions, by introspective assessment and by behavioural observation (Eysenck, 1975). Branscombe (1987) argued that consciously-generated affect, which requires a considerable amount of effort in terms of attributional analysis, should be more easily verbalised or reported on than unconsciously generated emotion. This suggests that people should be most able to report accurately why they feel a particular way, or at least the factors that influenced their judgment, when the emotion is generated consciously (Branscombe, 1987). Emotions were therefore measured through introspective self-report.

Emotion Measures

There is a variety of emotion scales, most designed to suit emotional experiences in specific situations. These include workplace emotions – e.g., Fisher’s (1997) Job Emotion Scale (JES), Burke et al.’s (1989) Job Affect Scale (JAS) and Van Katwyk, Fox, Spector, and Kelloway’s (2000) Job-related Affective Wellbeing Scale (JAWS). There are scales
measuring emotions to advertising – e.g., Holbrook and Batra’s (1987) Standardised Emotional Profile and Edell and Burke’s (1987) Feelings towards Ads, and another measuring consumption emotions – e.g., Richins’ (1997) Consumption Emotion Set (CES). There are also a number of other emotion scales, detailed in Appendix 5.11.1. However, a review of these scales indicated limitations when applied to company crisis scenarios, either because they measure a very small range of emotions (e.g., EMFACS-7) or they measure emotions that are not applicable to consumers’ crisis experience (e.g., JES, JAWS, DES-IV or CES).

Scale Development for Emotions

As argued earlier in Chapter 3, part of the purpose of the focus groups was to develop a crisis emotion lexicon for further use in Studies 2 and 3. This was congruent with Carpenter and Halberstadt’s (1996) recommendation that layperson emotion research should use laypersons’ categorisations. This lexicon was used to develop an emotion scale suitable for crisis research.

To briefly review the focus group findings, I had sorted the 80+ different emotion words that participants had articulated about crises using Shaver et al.’s (1987) list of 135 emotion words into six emotion categories of anger, fear, sadness, joy, surprise and love. This list covered most of the terms generated by participants. While researchers such as Ekman (1992) categorised emotions into six groupings (anger, fear, sadness, enjoyment, surprise and disgust), they did not include a “love” category. As Study 1 participants used “love” category words like “fond”, “like” and “compassion”, congruent with Richins’ (1997) list of consumption emotions, it is argued that “love” was a suitable emotion category for consumer research.

To develop the crisis emotion scale, I used focus group participants’ most commonly used emotion words that fell into Shaver et al.’s (1987) six emotion groupings. The commonly used words were calculated by adding the number of times participants had used different emotion words in the 400 pages of transcripts. The most frequently recurring words in each category were selected for scale development (see Appendix 5.11.2). Participants most used words were from the anger category, followed by fear, sad and joy words, with a few surprise and love words. As a result, the crisis emotion scale used more words in the first four categories. For consistency, I used the adjective forms of the words where possible, in line with Fisher’s (1997) Job Emotion Scale.
However, in some instances where the adjective form was less suited to the instruction, “best describes any feelings felt towards the company”, I have used the word form that emerged from Study 1\(^5\) (see Table 15).

<table>
<thead>
<tr>
<th>Emotion category</th>
<th>Emotion words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>Angry, annoyed, contempt, disgusted, frustrated, outraged, dislike</td>
</tr>
<tr>
<td>Fear</td>
<td>Fear, worried, uneasy, apprehensive, scared, concerned, distressed</td>
</tr>
<tr>
<td>Sad</td>
<td>Disappointed, sympathetic, hopeless, insecure, sorry, unhappy</td>
</tr>
<tr>
<td>Joy</td>
<td>Relieved, satisfied, enjoyment, contented, glad</td>
</tr>
<tr>
<td>Surprise</td>
<td>Surprised, shocked, amazed</td>
</tr>
<tr>
<td>Love</td>
<td>Liking, compassion</td>
</tr>
</tbody>
</table>

Because participants identified emotions directed both towards the company and towards the product, two separate scales were devised using the words identified in Table 15. For face validity, emotions that were unsuitable for each scale were not included. For example, it made sense to include fear words in emotions towards flying with the company, but not in emotions felt towards the company. Thus for feelings towards the company, anger, sadness, surprise, joy and love words were used. For feelings felt towards flying with the company, fear, joy and sadness words were used (see Appendix 5.12 for the final scales).

**Measuring Emotional Intensity**

Fisher’s (1997) Job Emotion Scale measured intensity using ‘1 = not at all’, up to ‘5 = extremely’. In line with this scale, but for consistency with the other 7-point questionnaire scales, the crisis emotion scale was anchored by ‘1 = not at all’ and ‘7 = very much’. This scale was tested and adjusted in Studies 2 and 3 for reliability and validity, and in Study 3 was assessed for convergent and discriminant validity.

\(^5\) That is, “annoyed” was used rather than “annoying”; “liking” (noun) was used rather than “likeable”; “dislike” was used rather than “dislikeable”; “enjoyment” (noun) was used rather than “enjoyable”. For “compassion” (noun), “amazed” (adverb) and “worried” (adverb), there was no suitable adjective substitute. While “fearful” is the adjective form of “fear”, this is not in common usage.
Measuring Behavioural Intentions

As noted in Chapter 2, previous crisis research had not captured the full range of potential behaviours triggered by a company crisis. As a result, the focus group study was used to generate a list of reported behaviours in a crisis in order to ensure that the scale used in Studies 2 and 3 covered the potential range of likely consumer behaviours.

As reported in Study 1, I used Folkman and Lazarus’ (1988) categories of problem-focused behaviour and emotion-focused coping behaviour to categorise behaviour. In a crisis, problem-focused behaviour deals with crisis practicalities such as returning goods in a product recall (e.g., the two paracetamol crises) or helping others (e.g., providing showers for neighbours during the Esso gas crisis). Emotion-focused coping behaviours involve such strategies as information search, seeking social support and avoidant and confrontive strategies (Folkman & Lazarus, 1988). In Study 1, I classified nine behaviours as emotion-focused behaviour. These behaviours were directed towards the company and its products or services (see Table 16). As these company-directed behaviours had the potential to impact company outcomes, such as sales, they became the focus for the behavioural intention scale, rather than coping behaviour.

<table>
<thead>
<tr>
<th>Behaviour type</th>
<th>Associated actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product switching</td>
<td>Temporary and permanent switch to a competitor’s product.</td>
</tr>
<tr>
<td>Complaining</td>
<td>To government department or authority, to media, to company.</td>
</tr>
<tr>
<td>Inaction/loyalty</td>
<td>Continuing purchase of the product or service (loyalty or inertia), or no action.</td>
</tr>
<tr>
<td>Word-of-mouth</td>
<td>This included warnings given to, and discussions with, family and friends and encouraging others to avoid the product.</td>
</tr>
<tr>
<td>Information search</td>
<td>Following media stories for more information; searching the internet; seeking information from government departments, the company and supermarket staff; reviewing other product/service options.</td>
</tr>
<tr>
<td>Boycott</td>
<td>Involved temporary or permanent boycott of product involved – or of all company-made products.</td>
</tr>
<tr>
<td>Product avoidance</td>
<td>Involved temporary or permanent avoidance of product and of products in the same product category (e.g., all peanut butters).</td>
</tr>
<tr>
<td>Reduced use</td>
<td>Using less of the product.</td>
</tr>
<tr>
<td>Legal action</td>
<td>One Legionella sufferer joined a class action.</td>
</tr>
</tbody>
</table>
The consumer behaviours of word-of-mouth communication, complaining, switching, loyalty, inertia, and purchase intentions are well established in the literature. When behaviour prediction is of primary concern, some researchers believe behavioural intention measures are most appropriate since they offer the greatest predictive power (e.g., Granbois & Summers, 1975; Warshaw, 1980 in Engel et al., 1993). Fishbein and Ajzen (1975) defined behavioural intention as the person’s subjective probability that they will perform some behaviour.

Measuring Behavioural Intent

No behavioural intention scale was identified measuring all behaviours reported in Study 1. However, a review indicated the existence of a range of behavioural intention scales. A number of behavioural intention scales were reviewed (see Appendix 5.13.1). These included those by Blodgett, Hill, and Tax (1997), Patterson, Johnson, and Spreng (1997), Petrevu and Lord (1994), Dodds, Monroe, and Grewal (1991) and Juster (1966). Two scales more closely covered behaviours reported in Study 1, those by Zeithaml et al. (1996) and Singh (1988, in Bruner et al., 2001) therefore, in this section I justify the selection of scale items by these researchers. Zeithaml et al. (1996) noted that previous research had not captured the full range of potential behaviours likely to be triggered by service quality and developed a 13-item battery that measured five factors. See Table 17. Tested across four studies, it showed reasonable internal consistency ranging from below .60 to .94.

Table 17 Zeithaml et al.’s (1996) Behavioural Intentions Battery

<table>
<thead>
<tr>
<th>Factor</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Switching propensity</td>
<td>Doing less business with the company in the next few years;</td>
</tr>
<tr>
<td></td>
<td>Taking some business to a competitor that offers better prices.</td>
</tr>
<tr>
<td>2. External response to problem</td>
<td>Switch to a competitor if there are problems;</td>
</tr>
<tr>
<td></td>
<td>Complaining to other customers;</td>
</tr>
<tr>
<td></td>
<td>Complaining to external agencies such as the Better Business Bureau.</td>
</tr>
<tr>
<td>3. Internal response to problem</td>
<td>Complaining to the company’s employees if a service problem is</td>
</tr>
<tr>
<td></td>
<td>experienced.</td>
</tr>
<tr>
<td>4. Loyalty to the company</td>
<td>Saying positive things about the company;</td>
</tr>
<tr>
<td></td>
<td>Recommending the company to someone who seeks advice;</td>
</tr>
<tr>
<td></td>
<td>Encouraging friends and relatives to do business with the company;</td>
</tr>
<tr>
<td></td>
<td>Considering the company as first choice to buy services;</td>
</tr>
<tr>
<td></td>
<td>Doing more business with the company in the next few years.</td>
</tr>
<tr>
<td>5. Willingness to pay more</td>
<td>Continuing business despite higher prices;</td>
</tr>
<tr>
<td></td>
<td>Pay a higher price for benefits.</td>
</tr>
</tbody>
</table>
Singh (1988, in Bruner et al., 2001) developed a scale measuring three kinds of complaint intention – see Table 18. Exploratory and confirmatory factor analysis provided support for a 3-factor structure and discriminant validity. There was good internal consistency with coefficient alphas ranging from .75 to .84.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complaint intention to a third party</td>
<td>To a consumer agency; Via a letter to a local newspaper; Via legal action.</td>
</tr>
<tr>
<td>2. Complaint intention (private)</td>
<td>Intention to reuse a repair shop; To speak to friends and relatives and convince friends not to use the shop.</td>
</tr>
<tr>
<td>3. Complaint intention</td>
<td>To the store manager; To the repair shop; Inaction.</td>
</tr>
</tbody>
</table>

As the scales by Zeithaml et al. (1996) and Singh (1988, in Bruner et al., 2001) most closely resembled the behaviours described in Study 1, and as they were reasonably reliable, these were selected for use. Using the researchers’ questionnaire items, I developed a 20-item scale (see Appendix 5.13.2) to gauge negative and positive behavioural intentions towards the service, covering the range of behaviours described in Study 1 (see Table 16). However, the behavioural intention of legal action was not included for face validity reasons, as this was considered not appropriate to the readers’ perspective of the vignette. Additionally, three behaviours were identified in Study 1 for which no scales were located and for which three new measures were created, item (d) deciding not to use the entire product category, item (f) boycott/avoidance of other company products/services and item (m) information seeking (see Appendix 5.13.2).

**Measuring Attitude to the Company**

While there are a multitude of attitude scales, only three were identified that measured attitude towards a company. These are now examined, and the argument is made for use of Stafford’s (1996) scale (in Bruner et al., 2001).

Hui, Dubé, and Chebat’s (1997, in Bruner et al., 2001) scale measured attitude towards a banking institution using a 3-item scale measured on a 7-point scale. As the scale measured liking of the company, recommending it to friends and remaining a customer, the latter two items appear to confound word-of-mouth and loyalty behavioural intents with attitude.
Homer’s (1995 in Bruner et al., 2001) 9-item scale measuring overall attitude toward the business provided no examination of the scale’s validity.

Day and Stafford’s (1997, in Bruner et al., 2001) 3-item scale measured attitude to the service provider using a 7-point bipolar scale. When tested for reliability, it had coefficients alpha of .97 and .94, but no examination of validity. This was selected due to its shortness and internal consistency. See Appendix 5.14 for the final scale used.

**Measuring Factors That Were Controlled**

Congruent with Affective Events Theory (AET) proposal that the trait of negative affectivity (NA) and current mood state affected attributional or emotional outcomes, it was contended that these constructs therefore required measurement when attribution or emotions were tested.

**Negativity Affectivity**

In Chapter 2, AET predicted that affective traits set the stage for individuals to have more or less intense bouts of emotion. In particular, individuals high in Negative Affectivity (NA) have a predisposition to react more strongly to negative events (Weiss & Cropanzano, 1996). NA describes one’s tendency towards tension, anxiety and agitation (Watson & Tellegen, 1985). If the sample of participants being tested contains a disproportionate number of high NA individuals, results could be skewed. Conversely, a disproportional number of high PA individuals could skew results. Thus prior measurement of levels of NA and PA was required through use of the Positive and Negative Affectivity (PANAS) scale (Watson & Tellegen, 1985; Watson et al., 1988).

While PANAS is used to measure state mood (current mood state) and trait mood (affectivity), the instrument has been used to measure trait NA and PA. In the trait form, participants indicate the degree to which they generally feel the way each adjective indicates, with positive and negative affectivity scales consisting of 10 adjectives each. Watson and his colleagues (1988) found the reliability of both scales on the PANAS to be acceptable in terms of both internal consistency ($\alpha = 0.88$ for positive affectivity, $\alpha = 0.87$ for negative affectivity) and test-retest reliability ($r = 0.68$ for positive affectivity, $r = 0.71$ for negative affectivity) (Nemanick & Munz, 1997). Aquino, Grover, Bradfield and Allen (1999) found the scale’s reliability to be satisfactory, ($\alpha = 0.85$) However, Weiss and Cropanzano (1996) noted a number of problems with the NA/PA scale, notably conceptual ambiguity regarding
the two dimensions. Despite this reservation, both NA and PA were measured with PANAS (see Appendix 5.15) just prior to the manipulation.

**Mood**

As noted in Chapter 2, mood can influence evaluative judgments, emotions and social behaviours (e.g., Weiss & Cropanzano, 1996; Zillman, 1993), therefore valence and level of mood were assessed just prior to the experiment. Weiss and Cropanzano (1996) argued for using the dimensions of Hedonic Tone and Intensity to measure mood. While this measure has received empirical support and is robust across other paradigms, it uses 24 items, adding substantially to questionnaire length. Length considerations also ruled out the 20-item Job Affect Scale (Burke et al., 1989) and the 37-item Profile of Mood States – Short Form (Shacham, 1983). Instead, the instrument selected was the 4-item Mood Short Form Scale (MSF) developed by Peterson and Sauber (1983 in Bearden, Netemeyer, & Mobley, 1999) which had a coefficient alpha between .74 and .78 for three samples tested. Kamins, Marks and Skinner (1991) found a higher coefficient alpha of .81 – see Appendix 5.16 for the scale.

**Measuring Demographic Variables – Gender, Age, Income, Education, Culture**

The literature examination also indicated that age, gender, culture, education and income level could affect results for emotion, attributions and behaviour.

**Culture**

As culture affects both attributions (with individualists making more internal attributions and collectivists making more external or situational attributions) and expressed emotions, it was important to identify culture. There are various scales measuring levels of individualism and collectivism (e.g., Triandis et al., 1988; Wagner & Moch, 1986). However, each scale contains over 40 items. One shorter 20-item measure is Wagner III’s (1995) Individualism-collectivism scale. However, due to the existing questionnaire’s length, culture was measured using the same question from Study 1 (see Appendix 5.17) with the same scoring method, that is, Hofstede’s (2001) country scores.

**Gender**

Gender impacts both emotions and behaviour. Studies have shown that women’s anger response (Knight et al., 1985) and anger intensity (Averill, 1982) is higher than for men, and that women use more sad words, while men use more aggressive words (Timmers et al., 1998). Additionally, behavioural expression of emotion differs between genders (Brody, 1996). Therefore, it was important for gender to be measured. Participants were asked to
classify their gender as dichotomous nominal data with numbers provided for a male and female category – see Appendix 5.17.

**Age**

As age impacts emotional response, with anger levels declining with increasing age (Knight et al., 1985), age was measured as a continuous variable using a ratio scale. See Appendix 5.17.

**Income**

Results of a study by Weinberger and Romeo (1989) found that, following a product crisis, lower income groups experienced stronger negative purchase behaviour than did higher income groups. As a result, income was measured as a categorical variable in dollars, with participants asked to assess their income. In Australia, this is generally accepted as pre-tax earnings – see Appendix 5.17.

**Education**

Weinberger and Romeo (1989) found that following a product crisis less educated groups experienced stronger negative purchase behaviour than did more highly educated groups. Education was measured as a categorical variable – see Appendix 5.17.

---

**Controlling for Other Variables**

**Usage Levels**

Weinberger (1986) found that product usage affected response to negative publicity, with heavy product users more likely to disbelieve negative product publicity related to a product causing illness. Therefore, usage levels of the service were controlled in the following way: *Imagine that this is a real story about a real situation and that you or those close to you frequently fly with D.A.*

**Company Reputation**

To control for company reputation, in the manipulation, the airline company was described in the following way: *D.A., a long established and reputable local airline company, has not previously been involved in any major safety crisis.*
Credibility of Newspaper

To control for the credibility of the newspaper format used, the following statement was included: *On the next page you will read a story printed in a fictitious Australian newspaper called The Sunday News - assume that it is a reliable and reputable newspaper.*

Final Questionnaire Structure

Each questionnaire consisted of an A4 booklet printed in black on white paper. On the cover page, the purpose of the study was outlined (gauging people’s reactions to a major accident), along with the voluntary nature of answering the questions, and an assurance of questionnaire confidentiality. The inside page had an instruction section on question answering. This was designed to reduce evaluation apprehensions and, in Study 2, experimenter cues that may result in biased responses, as recommended by Fromkin and Streufert (1976). Both in the instruction section, and at the top of each right hand page, a statement encouraged participants not to look ahead or to turn pages until they had completed each section.

Next, as mood and negative affectivity were expected to impact outcomes, these were tested prior to the main body of the questionnaire. This was followed by a statement regarding the story to come (see Appendix 5.19). On turning over the page, there was The Sunday News story providing the crash cause details (see Appendix 5.2 for an example of the story), with participants viewing one story only, as this was a between-subjects design. The facing page listed the involvement scale and the manipulation check for the crash cause. After turning over the next page, participants viewed the news story giving one account from the airline company’s CEO, followed by questions regarding accountability and attributions, including foreseeability and intentionality. The next double page spread contained questions on responsibility, emotions felt towards the airline company and towards flying with the company, then the manipulation check for the death toll. On the following pages were questions on behavioural intentions, attitude, and demographics. This was followed by questions on the reality and believability of the news stories (see Appendix 5.18). Participants were also asked whether they had followed instructions not to look ahead, what they believed was the purpose of the questionnaire, and there was a section for participants to add comments. On the final double page there was a thank you note containing a debriefing statement about the true purpose of the questionnaire.
CHAPTER 6 — STUDY 2

Chapter Outline

This chapter discusses the results for Study 2, which pilot tested the data collection instrument. The questionnaire – development of which was discussed in Chapter 5 – used a student sample in a factorial between-subjects design. This study had a number of purposes: to ensure that the operationalisation of the independent variables, the two Crisis types and Account, was successful; to check each Crisis type scenario against a manipulation check to ensure that each fitted unambiguously into one of the six cells; to identify any potential problems with the data collection instruments, that is, to check for multicollinearity, singularity and for scale reduction using an exploratory factor analysis. This was particularly important for the newly developed emotion scales and the adjusted data collection instruments of behaviour and involvement scales (both constructed from other scales, with new items), to check dimensionality and the extent of scale item intercorrelations.

This study also allowed for the preliminary testing of the main research objectives. As such, it investigated the impact of the three independent variables of Locus Crisis type (internal or external), Controllability Crisis type (controllable or uncontrollable) and Account (no comment, denial, excuse, justification, confession) against the dependent variables of emotions, behaviours, attitude, involvement, accountability, responsibility and a variety of attributions. In addition, the predicted impact of mood and personality factors of Negative and Positive Affectivity (NA/PA) on emotions and attributions were tested. Demographic factors were controlled for and also examined for potential consumer impact.

Research Design

The experiment tested the three independent variables of Locus Crisis type (internal or external), Controllability Crisis type (controllable, ambiguous or uncontrollable) and Account (no comment, denial, excuse, justification, confession) against the dependent variables, in a 2 x 3 x 5 between-subjects factorial design yielding 30 possible combinations, as per Table 19.
<table>
<thead>
<tr>
<th>Locus</th>
<th>Controllable (C)</th>
<th>Ambiguous (A)</th>
<th>Uncontrollable (U)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Controllability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internal (I)</td>
<td>External (E)</td>
<td></td>
</tr>
<tr>
<td>No comment (N)</td>
<td>ICN</td>
<td>ECN</td>
<td>IAN</td>
</tr>
<tr>
<td>Denial (D)</td>
<td>ICD</td>
<td>ECD</td>
<td>IAD</td>
</tr>
<tr>
<td>Excuse (E)</td>
<td>ICE</td>
<td>ECE</td>
<td>IAE</td>
</tr>
<tr>
<td>Justification (J)</td>
<td>ICJ</td>
<td>ECJ</td>
<td>IAJ</td>
</tr>
<tr>
<td>Confession (C)</td>
<td>ICC</td>
<td>ECC</td>
<td>IAC</td>
</tr>
</tbody>
</table>

**The Sample**

The sample comprised 316 Griffith University students whose median age was 21. Most were undergraduate students with a low median income. Two-thirds of the sample was female and one-third was male, with 83% from individualist cultures (e.g., Australian, Scandinavian) and 17% from collectivist cultures (e.g., Chinese, Eastern European). Data were collected over a three-week period, with participation encouraged via entry into a prize draw (see Appendix 6.1). Participants were randomly assigned to a treatment condition.

**Graphical Examination of the Data**

Initial data cleanup included recoding of reverse scored items. Some items were recoded so that higher scores reflected higher values of the construct. As this was a pilot study with a small sample (10) for each of the 30 treatments, the main focus was on univariate data analysis using the Statistical Program for the Social Sciences (SPSS) program. However, multivariate data analysis was also conducted testing the independent variables against the dependent variables in order to identify potential problems.

**Missing Data**

Missing data analysis showed that, for all questions (except the mood scale), the amount of missing data fell substantially below the 5% mark considered significant by Tabachnik and Fidell (2001). Data appeared to be missing at random (see Appendix 6.2.1).
Thirty participants (9.5% of the sample) did not complete all mood scale questions, perhaps because this scale was considered unimportant, or it was overlooked. This pattern in the missing data required that group means for those with missing mood scale answers were compared against the remainder of the sample using an independent-samples t-test. This used Levene’s test for equality of variances to test whether the variance of scores for the two groups (respondents and non-respondents) were the same (Pallant, 2001). Several variables were selected at random to compare the two groups: involvement, responsibility, attribution of internal controllability and the emotion of surprise, revealing no significant differences between the groups (see Appendix 6.2.2). As missing values were scattered throughout cases and variables, deletion of entire cases could have meant substantial loss of respondents (Tabachnik & Fidell, 2001), reducing cases for analysis from 316 to 262. Thus exclusion of missing cases was pairwise, deleting results only for the variable with the missing data (Coakes & Steed, 2003).

Checking Univariate Assumptions

In this section, I discuss the techniques used for checking assumptions in general. Full details on tests for assumptions of normality for all individual variables are available in Appendix 6.2.

The Kolmogorov-Smirnov and the Shapiro-Wilk tests of normality showed a significant result of < .001\(^6\) for the 100 questionnaire items (excluding demographic variables and manipulation checks), indicating skewness and kurtosis for all results. This violation of the assumption of normality is common in larger samples (Pallant, 2001) and was expected, given the nature of the study. Checks for outliers, univariate assumptions of normality (skewness and kurtosis), linearity and homoscedasticity were made for each variable in the ungrouped data before analysis. Although in factor analysis some degree of multicollinearity is desirable, departures from normality, homoscedasticity and linearity diminish observed correlations (Hair, Anderson, Tatham, & Black, 1998).

Checks for outliers and extreme scores were made using boxplots. To check for outlier effects, I examined the differences between the means and the trimmed means for each item. In line with Hair et al.’s (1998) recommendation, outliers were retained where there was no proof of aberrance (i.e., little impact on the mean).

---

\(^6\) Significant value is less than .05.
Descriptive information and histograms with normal distributions overlaid were used to check for skewness and kurtosis of individual items. Individual variables showed skewness in expected directions – e.g., for emotion, anger was negatively skewed, while liking was positively skewed. Normality plots (Q-Q plots in SPSS) were then examined and, for items showing substantial deviation from the normal line, skewness and kurtosis figures were examined. Those variables were then examined to assess whether they fell within the normal range of -2 to +2 for skewness and kurtosis, by using the ratio of skewness divided by its standard error, and the ratio of kurtosis divided by its standard error. In large samples, variables with statistically significant skewness often do not deviate enough from normality to make a substantive difference in the analysis (Tabachnik & Fidell, 2001). Tabachnik and Fidell (2001) noted that, although data transformations are often used as a remedy for outliers and failures of normality, linearity and homoscedasticity, they are not universally recommended. Additionally, as transformed variables resulted in complex items in factor analysis and affected scale reliability due to increased scale variance, transformations were not used in the analysis.

The assumption of linearity was assessed for hypothesised relationships between variables. As variables were numerous, it was not possible to screen all possible pairs, therefore, as recommended by Tabachnik and Fidell (2001), skewed pairs likely to depart from linearity were assessed. For ungrouped data, the assumption of homoscedasticity (that the variability in scores for one continuous variable is roughly the same at all values of another continuous variable) was assessed. When checking for linearity, many bivariate scatterplots between two variables demonstrated substantial heteroscedasticity with non-linear and bulging data distributions. However, heteroscedasticity is not fatal to analysis of ungrouped data (Tabachnik & Fidell, 2001).

**Questionnaire Factor Analysis – Exploratory**

Exploratory factor analysis was conducted using all variables in the pilot questionnaire, to allow examination of the correlation matrix for multicollinearity, to examine the separation of the constructs on different factors for common method variance, and to reduce the number of dimensions. The sample number (between 310 and 316 for each item analysed) was congruent with Tabachnik and Fidell’s (2001) recommendation of a minimum of 300 cases for factor analysis.
The questionnaire used scales that operationalised the constructs of mood, positive and negative affectivity (PANAS), involvement, attributions of locus, internal control, external control, intentionality and foreseeability, judgments of accountability and responsibility, emotions, behavioural intents and attitude. This totalled 100 items. Common factor analysis (FA, or Principal Axis Factoring) was used, rather than Principal Components Analysis (PCA), as FA analyses covariance, and its solution concentrates on variables with high communality values (shared variance) rather than PCA’s focus on total variance (Tabachnik & Fidell, 2001).

As the questionnaire measured similar constructs (e.g., mood, PANAS, emotion), there was the potential for multicollinearity and singularity among the scales. Additionally, self-report measures make the problem of common method variance more likely. To address common method variance issue, Podsakoff and Organ (1986) suggested a post-hoc factor analysis of similar constructs to check whether a “general” factor emerges (in Kline, Sulsky, & Rever-Moriyama, 2000), that is, a higher order factor structure.

To address the issues of multicollinearity, singularity and common method variance, I started with a general factor analysis of all the individual variables (but not the demographic items and the manipulation checks) to examine whether there were coherent sub-groups of variables that were related to one another, but relatively independent of other groups of similar variables – in other words, to check for overlaps between constructs. Following this, I conducted further post-hoc factor analysis on related constructs.

For the general EFA, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .89, above the recommended value of .6 (Tabachnik & Fidell, 2001) and Bartlett’s Test of Sphericity was significant ($p < .001$). Visual inspection of the correlation matrix showed

---

7 Multicollinearity is a concern if variables are correlated at .90 or above on a correlation matrix, or if two variables with a bivariate correlation of .70 are included in the same analysis (Tabachnik & Fidell, 2001). With singularity, as one of the variables is a combination of two or more of the other variables (Tabachnik & Fidell, 2001) it is redundant. When variables are multicollinear or singular, they contain redundant information so that fewer variables are needed in the same analysis.

8 According to Williams, Cote, and Buckley (1989), items intended to measure different, but related constructs, which have similar content and identical scale response formats, cause spurious correlations to some degree (in Gardner et al., 1998), or common method variance. Respondents, for reasons including self-consistency motives, produce spurious correlations between such scales in an attempt to be consistent (Gardner et al., 1998).
substantial numbers of correlations greater than .30, indicating that a factor analysis was justified (Hair et al., 1998). This inspection revealed that no correlations approached one, indicating that there was no singularity or extreme multicollinearity (Hair et al., 1998). Twenty-one items had eigenvalues over one explaining 70.52% of the variance. With so many variables, the scree plot was ambiguous, but 20 factors appeared likely.

A number of items had communalities below the .4 level at which a variable is normally retained, with foreseeability and intentionality being particularly low. Very low communality values indicate that the variables are unrelated to other variables in the set (Tabachnik & Fidell, 2001). Other variables with communalities below .4 were two behaviour items (decide not to fly with any airline, and continue flying with DA, but less often), and a locus attribution. However, as communalities are lower in PAF than in PCA (Hair et al., 1998) all items with low communalities were retained at this stage. Although the constructs showed separation on factors, because some factors showed many complex items, an oblique rotation (oblimax on SPSS as the items were correlated) was conducted. The pattern matrix showed less complex items, with variables separating out into theoretically congruent groupings. Some items (behaviour d, which referred to a general contagion effect, a locus attribution, and the intentionality attribution) did not relate to any factor and were removed from the factor analysis and another oblique rotation carried out. Again more items (behaviour of inertia, a responsibility item and the emotion of hopelessness) were not related to any factor and were removed from the analysis. Another oblique rotation was carried out and this time the accountability item and the emotion of disgusted did not load on any factors.

As the point of this exercise was to check for overlaps between constructs, it was decided not to continue with rotations as particular items in constructs or related constructs were consistently loading on specific factors. Items that separated out consistently on different factors were mood, PA and NA (of the PANAS scale), involvement and emotions, the latter of which loaded on several separate factors, according to emotion type and different behaviours. Other constructs grouped together: attributions consistently grouped on different factors with attributions of foreseeability, accountability and responsibility judgments, which conceptually made sense. However, attitude items consistently grouped with behaviour, one behaviour – deciding not to fly with the airline – consistently grouped with emotions through all rotations, and the complaining and information-seeking behaviours grouped together.

A scale reliability analysis was conducted for those constructs (mood, PANAS) that showed no overlap with other constructs in the exploratory factor analysis. Post-hoc EFAs
were conducted for constructs with overlapping items and complex factors (behaviour with attitude, and attribution items) and to check factor structures (involvement, emotions, behaviour).

*Mood Scale Items - Scale Analysis*

The four items in the mood scale grouped together and loaded consistently on Factor 9 (mood), with no overlap with other factors. A reliability analysis of the scale showed an alpha coefficient of .83, indicating that the scale was reliable with the sample. There were no items with corrected inter-item correlations of less than .3, thus all items were measuring the same construct as the scale (Pallant, 2001).

*PANAS Items - Scale Analysis*

The factor analysis of the entire questionnaire demonstrated that Positive Affect (PA) and Negative Affect (NA) each loaded on factors that were separate from each other and from the remaining constructs that were tested. Thus, Weiss and Cropanzano’s (1996) concern that there was conceptual ambiguity regarding the two dimensions was not supported. As high levels of NA were hypothesized to have a positive linear relationship with negative emotions, a reliability analysis was separately conducted for PA and NA. PA had a Cronbach’s alpha of .90, while NA had a Cronbach’s alpha of .82.

*Involvement - Scale Analysis*

The 10-item involvement scale was based on Zaichkowsky’s (1985) widely tested PII involvement scale, with items from two other scales. All items for involvement loaded together on Factor 3 in the questionnaire factor analysis. However, a further EFA was conducted to check McQuarrie and Munson’s (1992) argument that involvement contains two factors - interest and importance. The EFA indicated a 1-factor solution according to the scree plot, with this factor accounting for 67.79% of the variance (see Appendix 6.3.1).

A reliability analysis of the 10-item scale showed a Cronbach’s alpha of .95, congruent with Zaichkowsky’s (1985) reliability correlation of .90. However, this was particularly high, indicating that some items could be removed to reduce scale size. The scale was reduced to four items (is important, matters to me, is significant, is of interest) resulting in a coefficient alpha of .91, indicating that these items were sufficiently reliable as a test of involvement.
Attributions

Attributions referred to locus (internal/external), internal controllability, external controllability, intentionality and foreseeability, all of which had been predicted to impact emotions, behaviour and attitude. However, on the overall correlation matrix, a number of attribution-like items showed overlap with these constructs: responsibility (which some researchers consider to be an attribution) and accountability. As a result, a post-hoc factor analysis was conducted for these related items was conducted, in line with Podsakoff and Organ’s (1986) recommendation.

Factor analysis of attribution and attribution-like items.

I conducted a post-hoc factor analysis of the 15 attribution or attribution-like items: McAuley et al.’s (1992) 3-factor attribution scale, each consisting of three items of attribution of locus, internal controllability, and external controllability, the 1-item intentionality and 1-item foreseeability scales, and the 3-item responsibility and 1-item accountability scales. The EFA indicated a 4-factor solution that was considered to be good (see Appendix 6.3.2 for details). Factor 1 was internal controllability, Factor 2 external controllability, Factor 3 locus and Factor 4 responsibility. With the attribution scale, two locus items loaded with internal controllability items. However, as further testing indicated that treatment conditions may have influenced results, and because this was an established and tested scale, the scale was retained without change. Attributions of foreseeability and intentionality had very low communalities of .193 and .005 respectively, did not load on any factors, and were removed from further analysis. Accountability appeared tied to the internal controllability, which made conceptual sense as this had been predicted to overlap with this construct. It was retained. See Appendix 6.3.2 for full details.

Scale reliability for attributions.

McAuley et al.’s (1992) scale was separately analysed for reliability. The Cronbach’s alpha for the attribution of locus (internal/external) was .68, for internally controllable was .82 and for externally controllable was .63. However, as participants received one of six scenarios (either internal and controllable, internal and ambiguous, internal and uncontrollable, external and controllable, external and ambiguous, or else external and controllable) scale checks using different treatment groups indicated improved scale reliability once treatment condition was considered.

Scale reliability – responsibility.

The post-hoc EFA had demonstrated that the responsibility scale did not overlap with attribution items. According to Karuza et al. (1990), the responsibility scale has good internal
consistency, with a Cronbach’s alpha coefficient ranging from .70 - .90. In this study the Cronbach’s alpha was .79.

**Emotion**

From emotion theory (e.g., Shaver et al., 1987), the emotion scale was expected to have a 6-factor structure reflecting emotion categories of anger, fear, sadness, joy, surprise and love. On the general factor analysis of the entire questionnaire, emotion items loaded into separate factors with no complex items, showing a 5-factor solution with fear and sadness items loading together.

As this emotion scale had never before been tested, a post-hoc factor analysis of all emotion items was conducted to check this structure. This indicated a 5-factor solution (for full details, see Appendix 6.3.3) with fear, joy, sympathy (a renaming of sadness due to its content), surprise and anger. The love items grouped with other factors and did not appear as a separate factor. Fear contained two sad items. Enjoyment showed as a complex item loading on the factor for joy and negatively on the fear factor.

**Scale reliability.**

As different emotions comprised the different factors, each emotion scale was separately analysed for reliability after removing items that belonged under different emotion categories.

**Factor 1: Fear**

Factor 1 contained all seven fear items for fear towards using the service (concerned, worried, apprehensive, uneasy, scared, distressed and fearful) as well as two words about service use which Shaver et al. (1987) categorised as “sadness” words: insecure and unhappy. The fear scale with the two sad items removed had a Cronbach’s alpha of .93. As this was the first time this scale was tested, no scale reduction was carried out.

**Factor 2: Joy**

Factor 2 contained all the joy items for emotion felt towards the company (relieved, contented, satisfied) and emotion felt towards using the service (enjoyment, glad, contented) plus one love word, “liking”. Although “enjoyment” showed as a complex item with fear, it was retained as it was correlated at .55 with joy. The scale for joy with “liking” removed had a Cronbach’s alpha of .83.
Factor 3: Sympathy

Factor 3 comprised emotions felt towards the company, with two sadness items, “sympathetic” and “sorry”, and one love item, “compassion”. An examination of these emotions indicated that they reflected sympathy felt towards the company, hence Factor 3 was renamed sympathy. This scale had a Cronbach’s alpha of .73. It is interesting to note that this was substantially higher than the original sad scale items, which did not add to the reliability of the scale.

Factor 4: Surprise

Factor 4 comprised the three original scale items for surprise (surprised, shocked, amazed). The scale reliability was a little low with a Cronbach’s alpha of .66. Therefore, for the next study, extra surprise items (astounded, astonished) were selected from Roget’s Thesaurus (1998) to improve reliability.

Factor 5: Anger

Factor 5 comprised all seven anger scale items (angry, disgusted, frustrated, annoyed, dislike, outraged, contempt) plus three sad items (disappointed, hopelessness and unhappy). Removing the three sad items resulted in a scale with a Cronbach’s alpha of .86. As this was the first time this scale was tested, no scale reduction was carried out.

Behaviour

During the exploratory factor analysis of the entire questionnaire, after oblique rotation, the items for behaviour loaded into five separate factors with no complex items. Thus the hypothesised model of complaining, loyalty, word-of-mouth, switching and information-seeking was supported, although the contagion item (stop flying with any airline) did not load on any factor.

Because attitude items loaded with behaviour, a post-hoc EFA was conducted combining both behaviour and attitude, finding that behaviour and attitude did, in fact, overlap (see full details in Appendix 6.3.4). This indicated that common method variance was at work, especially when it was noted that the wording of the tested attitude scale was similar to that for behaviour. As a result, attitude was discarded from further analysis and a new attitude scale selected for the main study, Study 3.
Next, a factor analysis was conducted on the behaviour scale as this version of the scale, containing items from established scales plus two new items from the focus group results (contagion effect and information-seeking), had never before been tested.

The EFA was re-run with all the behaviour scale items. The scale was expected to have a 6-factor structure comprising word-of-mouth behaviour, complaining, loyalty, switching and the two new items from the focus groups, contagion effect and information-seeking. The results indicated a 4-factor solution that was considered good (see full details in Appendix 6.3.5). The four behaviour factors were loyalty, complaining, word-of-mouth behaviour and withdrawal of custom (a more accurate renaming of switching behaviour). Factor 1 consisted of six loyalty items, Factor 2 of four complaining items, Factor 3 of two word-of-mouth items and Factor 4 of four switching items and one word-of-mouth behaviour, (convincing friends not to fly with the airline), which was now considered to be a switching behaviour. The two behaviours added from the focus groups, contagion (decide not to fly with any airline) and information seeking (find out more information about this crisis) were removed as contagion did not load on any factors and information seeking showed as a complex item with similar scores below .5 on two factors.

Scale reliability.

Each of the separate factors that constituted the combined behaviour scale was separately checked for reliability.

Factor 1: Loyalty

The reliability analysis for Factor 1 (loyalty) containing the six loyalty behaviours was .90. However, as questionnaire reduction was an aim, along with maintaining high reliability, behaviours t and o were removed to leave a 4-item scale with the coefficient alpha of .93. This contained “recommending the airline to others”, “encouraging friends and relatives to use the company”, “considering the company as first choice” and “doing business with the company more often”.

Factor 2: Complaining

The reliability analysis for Factor 2 (complaining) showed a coefficient alpha of .93. It contained four complaining behaviours, “complaining to consumer agencies or relevant authorities”, “to company employees or a manager”, “to the media”, and “to relevant web sites”.

Factor 3: Word-of-mouth (WOM) behaviour

Factor 3, word-of-mouth behaviour, consisted of two WOM activity items (talk about this with friends and relatives, and with other airline customers) and excluded the WOM behaviour (convincing friends and relatives not to fly with the airline), which loaded on Factor 4. A reliability analysis of the two successful WOM items resulted in a coefficient alpha of .72. However, as this was too few items for a reliable scale, it was decided to incorporate into Study 3 new positive and negative WOM items.

Factor 4: Switching, now “withdrawal of custom”

Factor 4, switching behaviour, contained four switching behaviours and one WOM item (convince friends and relatives not to fly with this airline). It was decided that this behaviour complemented other behaviours in the scale, now renamed “withdrawal of custom” and it was retained. The reliability analysis of this 5-item scale was .83, while the analysis using just the four switching behaviours resulted in a reduced Cronbach’s alpha of .76. In the interests of data reduction and scale reliability enhancement, one switching behaviour “Continue flying with the airline, but less often”, was removed and the WOM item left in. This 4-item scale, consisting of the three switching behaviours, “Decide not to fly with D.A.”, “Stop using other services operated by the airline”, “Switch to a competitor” and the WOM item resulted in a Cronbach’s alpha of .87, indicating good internal reliability.

Attitude

As noted in the section on behaviour, the attitude scale was dropped from the analysis as this construct overlapped with behavioural intent. A new scale was located for Study 3.

Summary Of Scale Changes Resulting From Factor Analyses

As a result of the factor analyses, intentionality and foreseeability were removed from the questionnaire. As attitude overlapped with behaviour, this scale was removed, and a new attitude scale selected for Study 3.

The scale for involvement was reduced to four items. While emotions were measured on two scales – emotions felt towards the company and emotions towards the using the service – these scales were summated according to their factor analysis results, resulting in a 7-item fear scale, a 6-item joy scale, a 3-item sympathy scale, a 3-item surprise scale (with two new items of “astounded” and “astonished” required), and a 7-item anger scale. Likewise, behavioural intentions were summated according to factor analytic results and contained a 4-item loyalty scale, a 4-item complaining scale, a 2-item word-of-mouth scale requiring new
items, and a 4-item scale renamed “withdrawal of custom”. The established and tested scales for mood, PANAS, and attribution were not changed.
Assumptions Underlying Multivariate Testing

The multivariate tests that were used in this study had a number of general assumptions underlying their use, plus additional technique-specific assumptions. These general assumptions are now discussed.

**Sample size and group size**

While the sample size was more than adequate for a regression analysis, as the desired sample was 15 to 20 observations for each IV (Hair et al., 1998), there were several opinions about necessary sample size for a satisfactory MANOVA. Hair et al. (1998) argued for the need for more cases in each cell than dependent variables. Although Iacobucci (2001) believed 30 participants per cell ensured sufficient power to detect significant differences, Tabachnik and Fidell (2001) argued that the analysis was robust to most violations of assumptions if there was a sample size of 20 or more per cell. While a MANOVA checking interaction effects between the 30 treatments resulted in a cell size of only 10, a MANOVA checking the effects of the five company Accounts resulted in 60+ participants per treatment cell, while checking the six Crisis causes resulted in 50+ participants per cell. Thus the results were considered robust to most violations. Cell sizes were approximately equal. Problems occur when the ratio is more than 1:1.5 (Coakes & Steed, 2003).

**Checking multivariate normality**

Statistical analysis was carried out under the assumption that all variables were multivariate normal, that is, that the joint effect of two variables was normally distributed (Hair et al., 1998). However, as there was no direct test for multivariate normality, most researchers test instead for univariate normality of each variable (Hair et al., 1998), which was previously conducted (see Appendix 6.2). Although this did not guarantee multivariate normality, when all variables meet this requirement, then any departures from multivariate normality are usually inconsequential (Hair et al., 1998).

As both multiple regression and MANOVA are sensitive to multivariate outliers, that is, a strange combination of scores on the various dependent variables (Pallant, 2001), Mahalanobis distance was used to identify multivariate outliers (see details in Appendix 6.4). Although the number of outliers was low and the scores were not extreme, a preliminary MANOVA indicated that the outliers impacted results, and therefore were not retained.
Multivariate testing assumes linear relationships among all pairs of interval-measured DVs. Deviations from linearity reduce the power of the statistical tests, first, because the linear combinations of DVs do not maximise the separation of the groups for the IVs, and second, because covariates do not maximise adjustment for error (Tabachnik & Fidell, 2001). Therefore I conducted within-cell scatterplots to check the presence of non-linear relationships among the dependent variables, as recommended by Coakes and Steed (2003). No curvilinear relationships were identified, although there was some bivariate heteroscedasticity among the summated DVs, although these DVs had not been hypothesised to be related. However, as noted earlier, the analysis is robust to most violations of assumptions if there is a sample size of 20 or more per cell.

Variables were tested for multicollinearity. This is a concern if the correlation among the dependent variables is .70 or above (Tabachnik & Fidell, 2001) as it indicates redundant dependent measures and decreases statistical efficiency (Hair et al., 1998). In the MANOVA analyses, multicollinearity was tested using Bartlett’s test, which assessed whether significant multivariate intercorrelations existed. Bartlett’s test needs to be significant ($p < .05$) for the MANOVA to be considered appropriate. However, increasing the sample size causes Bartlett’s test to become more sensitive to detecting correlations among the variables (Hair et al., 1996). Thus, Conlon (2003) recommended that, as well as Bartlett’s test, inspection of the pattern of correlation of variables on the residual SSCP matrix was required with more than two dependent variables, to indicate the degree of existing correlation that exists. These results and those for Bartlett’s test were reported for each MANOVA analysis.

Homogeneity of variance-covariance matrices was tested in the MANOVA analysis with Levene’s test, which determined whether the variability in each of the groups was similar. Results should be non-significant (that is, $p > .05$). However, MANOVA is reasonably robust to violations of this assumption, when group sizes are similar (Pallant, 2001), which they were. Homogeneity of covariance matrices was also tested in the MANOVA analyses using Box’s M test, the results of which must also be non-significant. Tabachnik and Fidell (2001) warned that Box’s M can be too strict with large sample sizes, and to disregard violations when cell sizes were equal. Where the homogeneity of variance-covariance matrices was violated, Pillai’s criterion, rather than Wilks Lambda was used (Conlon, 2003). However, where this occurred, results were similar, indicating the analysis was robust.
One main purpose of Pilot 1 was to test the effectiveness of the operationalisation of each of the three independent variables, the two Crisis types and Account, as well as preliminary hypothesis testing. With three independent variables and multiple dependent variables, assumptions were tested using ANOVAs, MANOVAs, and regression analysis. This section describes the results of the multivariate testing, summarized in Table 20.

Table 20 Tests carried out

<table>
<thead>
<tr>
<th>Tests carried out</th>
<th>Steps in testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Test effectiveness of Locus and Controllability Crisis types:</td>
<td>T-test</td>
</tr>
<tr>
<td>impact of IVs of Locus (internal/external) and Controllability</td>
<td>ANOVA</td>
</tr>
<tr>
<td>(controllable/ambiguous/uncontrollable) on manipulation check to</td>
<td></td>
</tr>
<tr>
<td>determine success of operationalisation using news story scenarios.</td>
<td></td>
</tr>
<tr>
<td>2. Test for interaction and a main effect of the three IVs on all DVs.</td>
<td>MANOVA</td>
</tr>
<tr>
<td>3. Test for interaction effects of three IVs on retained hypothesized</td>
<td>MANOVA</td>
</tr>
<tr>
<td>DVs (responsibility, accountability, emotions, behavioural intents).</td>
<td></td>
</tr>
<tr>
<td>4. Test for impact of Accounts on hypothesized DVs using post-hoc testing.</td>
<td>ANOVA</td>
</tr>
<tr>
<td>5. Test for interaction and a main effect of Crisis types on</td>
<td>MANOVA</td>
</tr>
<tr>
<td>hypothesized variables (attributions, responsibility, accountability,</td>
<td></td>
</tr>
<tr>
<td>emotions, behavioural intents, involvement).</td>
<td></td>
</tr>
<tr>
<td>6. Test for impact of demographic variables on dependent variables.</td>
<td>MANCOVA</td>
</tr>
<tr>
<td>7. Other manipulation check: crash severity.</td>
<td>T-test</td>
</tr>
</tbody>
</table>

No further testing e.g., impact of variables such as attributions on emotions and behaviour was conducted, as the major purpose of this pilot was to test the main structure of the questionnaire.

Test 1. Effectiveness of the operationalisation of Crisis types in scenarios

To check the effectiveness of the two Crisis types (using scenarios created as news stories with different crisis causes), I compared the scores for the Locus Crisis and the Controllability Crisis against their manipulation checks using separate tests.

First, I conducted an independent t-test to compare the Locus (internal/external) Crisis scores on the locus manipulation check. There was a significant difference in scores for internal and external crises, and the effect size, hand calculated using eta squared, was very large (eta squared = 0.195). See Table 21.
Table 21 T-test for Locus Crisis effectiveness against manipulation check

<table>
<thead>
<tr>
<th>Manip. check IV: Locus Crisis</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>$\eta^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable - locus</td>
<td>2.64</td>
<td>1.32</td>
<td>2,309</td>
<td>8.645</td>
<td>.20</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>- external</td>
<td>4.03</td>
<td>1.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Next, I conducted a one-way between groups ANOVA to test the impact of the Controllability (controllable, ambiguous, uncontrollable) Crisis on the manipulation check for controllability. There was a statistically significant difference at the $p < .05$ level in the score for the three groups $F(2, 308) = 17.27, p = .01$. Calculations indicated that the effect size was moderate (eta squared $= .10$). Post-hoc tests using Tukey’s HSD test indicated that the mean score for controllable ($M = 2.80, SD = 1.40$) was significantly different from uncontrollable ($M = 3.76, SD = 1.46$) and ambiguous ($M = 3.88, SD = 1.47$) crisis types. The uncontrollable crisis was significantly different from the controllable, but not the ambiguous, crisis (see Table 22).

Table 22 ANOVA for Controllability Crisis effectiveness against manipulation check

<table>
<thead>
<tr>
<th>Manip. check IV: Controllability Crisis</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>F</th>
<th>$\eta^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable – controllability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- controllable</td>
<td>2.80</td>
<td>1.40</td>
<td>2,308</td>
<td>17.273</td>
<td>.10</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>- ambiguous</td>
<td>3.88</td>
<td>1.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- uncontrollable</td>
<td>3.76</td>
<td>1.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpreting the results.

The significant difference between the internal and external Locus Crisis indicated that participants differentiated between these groups. However, in interpreting the ANOVA results for the Controllability Crisis, it was necessary to examine group means (Hair et al., 1998) in combination with Tukey’s HSD test results. This showed that while participants differentiated between the controllable and uncontrollable crises, and the controllable and ambiguous crises, there was insufficient differentiation between the uncontrollable and ambiguous crises, with the ambiguous crisis showing a slightly higher mean than that for uncontrollable crisis, as is evident in the means plots and box plots (see Appendix 6.5). This indicates that the
ambiguous crisis should be not be retained. However, as deleting results would result in a smaller sampling pool, it was retained at this stage.

Test 2. Interaction Effects of the Three IVs on the DVs using MANOVA

As there was more than one categorical factor with a number of levels and multiple dependent continuous variables that were related, MANOVA was used. MANOVA created a new summary dependent variable, and determined whether the mean differences among groups on the combined DV at different levels of an IV were larger than expected by chance (Tabachnik & Fidell, 2001). It provided the univariate results for each dependent variable separately, reducing the risk of an inflated Type 1 error that would result from conducting a series of ANOVAs (Pallant, 2001). Separate tests were then made for each IV.

A factorial between-groups MANOVA was conducted to investigate the impact of the three independent variables, Locus Crisis, Controllability Crisis and Account on all 15 dependent variables. These were involvement, attributions of locus, internal controllability and external controllability, responsibility, accountability, emotions (anger, sympathy, surprise, fear and joy) and behavioural intentions (word-of-mouth behaviour, withdrawal of custom, complaining and loyalty). While the cell size was too small to effectively test for interactions, the purpose was to identify potential problems for the main study, Study 3.

Assumption testing.

Preliminary assumption testing (normality, linearity, univariate outliers, homogeneity of covariance matrices and multicollinearity) indicated no serious assumption violations. Four multivariate outliers had previously been removed from the analysis. Box’s test for homogeneity of variance between the groups was not computed because there were fewer than two non-singular cells (Locus Crisis had two levels). One dependent variable (the external controllable attribution) violated Levene’s test of equality of error variances. Results were therefore interpreted using Wilks’ lambda.

Results.

Contrary to predictions, testing the three independent variables, two Crisis types and Account, on the centroid for the dependent variables indicated no interaction effects. Additionally, Account had no main effect, which may indicate a problem with the operationalisation of the different levels of Account. In contrast, a main effect were found for the impact of each of the two Crisis types, Locus Crisis and Controllability Crisis. The results are in Table 23.
Table 23 MANOVA interaction and a main effect

<table>
<thead>
<tr>
<th>IV</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>Partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locus Crisis x Controllability crisis x Account</td>
<td>120, 1785</td>
<td>.967</td>
<td>.583</td>
<td>.055</td>
</tr>
<tr>
<td>Locus Crisis x Controllability Crisis</td>
<td>30, 498</td>
<td>1.240</td>
<td>.180</td>
<td>.070</td>
</tr>
<tr>
<td>Locus Crisis x Account</td>
<td>60, 1008</td>
<td>1.033</td>
<td>.410</td>
<td>.058</td>
</tr>
<tr>
<td>Controllability Crisis x Account</td>
<td>120, 2048</td>
<td>1.039</td>
<td>.381</td>
<td>.058</td>
</tr>
<tr>
<td>Account (main effect)</td>
<td>60, 974</td>
<td>1.222</td>
<td>.125</td>
<td>.068</td>
</tr>
<tr>
<td>Locus Crisis (main effect)</td>
<td>15, 249</td>
<td>5.123</td>
<td>&lt; .001</td>
<td>.236</td>
</tr>
<tr>
<td>Controllability Crisis (main effect)</td>
<td>30, 498</td>
<td>2.395</td>
<td>&lt; .001</td>
<td>.126</td>
</tr>
</tbody>
</table>

Interpreting the results.

In the Locus Crisis, the internal crisis scored higher for accountability, responsibility, anger and degree of internal controllability, while the external crisis was perceived as more external than was the internal crisis. The means plots (see Appendix 6.7) showed, as expected, that participants held the company more accountable for the internal crisis than for the external crisis; participants made attributions that the internal crisis was more internal than the external crisis. Participants attributed the internal crisis to be significantly more internally controllable by the company than the external crisis; participants rated the company as significantly more responsible for the internal crisis than for the external crisis; and participants were significantly more angry about the internal crisis than about the external crisis.

For the Controllability Crisis, the controllable crisis was rated as more internally controllable and the company was perceived as more responsible and received less sympathy than for the uncontrollable or ambiguous crises. As expected, the means plots showed (see Appendix 6.8) that participants made attributions that the controllable crisis was significantly more internally controllable than were the uncontrollable and ambiguous crises. Participants saw the company as being significantly more responsible for the controllable crisis than for the uncontrollable and ambiguous crises and they felt significantly less sympathy for the company when the crisis was controllable, rather than uncontrollable or ambiguous. However, there was no significant difference in means between the uncontrollable and the ambiguous crises. Thus the ambiguous crisis did not add to the solution and was removed from further testing.
Test 3. Impact Of The Independent Variables On Hypothesized Dependent Variables Using MANOVA

The interaction failure between the independent variables and the failure of main effect for Account may have resulted from the large numbers of variables tested in the general MANOVA. While any number of dependent variables may be used (Tabachnik & Fidell, 2001), problems with MANOVAs occur with large numbers of dependent variables. As Stevens (1992, p. 153) noted, “While many investigators lump all the dependent variables together in a single analysis for MANOVA, this is not necessarily a good idea”. The complexity of the analysis is greater and the more stringent criterion based on the number of DVs makes it harder to find a multivariate effect (Conlon, 2003), reducing the power of the study and resulting in a poorer chance of finding significant effects.

As Account had been hypothesised to impact responsibility, accountability, foreseeability, intentionality, emotions, behaviours and attitude (although foreseeability, intentionality and attitude had previously been removed in the EFA), and the two Crisis types had been hypothesised to impact all dependent variables, a MANOVA was conducted for the independent variables, Account and Crisis types, and the hypothesised dependent variables that Account and Crisis types had in common: accountability, responsibility, emotions and behavioural intention. However, the results with 11 dependent variables were as before (for full details, see Appendix 6.9).

There was no significant interactions between any of the independent variables, but there was a main effect for the Locus Crisis, $F(11,257) = 3.342$, $p < .001$, Wilks’ Lambda = .875, partial $\eta^2 = .125$ and the Controllability Crisis, $F(22, 514) = 2.671$, $p < .001$, Wilks’ Lambda = .805, partial $\eta^2 = .103$, but not for Account.

Test 4: Impact of Account on Hypothesized Dependent Variables

The main effect of Account on hypothesised dependent variables had already been examined in the MANOVA described in Test 3, with no effects found. A reason for failure of the main effect was considered: that this was a treatment effect as, in Chapter 2, it had been argued that the different Accounts would be either more or less effective in different Crisis types.

To test this premise, scores for participants in the four different Crisis types (as the ambiguous crisis was no longer tested) were separated and a one-way MANOVA examined
the effects of Account on accountability, responsibility, emotions and behaviours. This was followed by one-way ANOVAs on emotions found to be significant after a Bonferroni adjustment. For the Locus Crisis, the impact of Account on surprise was significant, with post-hoc tests showing a difference between accounts of “justification” and “no comment”. However, results were mainly in the expected direction. For the Controllability Crisis, there were no significant differences for Account, although results were generally in the expected directions.

As Account’s failure did not appear related to treatment effects in different crisis types, the conclusion was that the different accounts were either not operationalised correctly, lacked credibility, or there was some primacy effect occurring, whereby participants’ focus was on the crisis scenario in the main story, rather than on the Account that followed this scenario on a following page. This required follow-up testing, which was conducted and is described in Pilots 2, 3 and 4.

Test 5: Impact of the Crisis types on the Hypothesized Dependent Variables

The main effect for the Locus and Controllable Crises was established in Test 2 in the MANOVA, which tested the impact of these crisis types on all 15 dependent variables of involvement, attributions of locus, internal controllability and external controllability, accountability, responsibility, emotions (anger, fear, sympathy, surprise, joy) and behavioural intentions (word-of-mouth, withdrawal of custom, complaining, loyalty).

After finding that the two Crisis types differed on the composite DV, it was necessary to determine which variables contributed most to the overall difference through investigating the results of tests of between-subjects effects using a post-hoc procedure. Because there were 15 dependent variables, to reduce the Type 1 error chance, I set the alpha level at a more stringent level of .003 using a Bonferroni adjustment (.05/15). An examination of the significance of the between subjects test effects showed a number of significant results for individual DVs below this level for both the Locus and Controllability Crises. The importance of the impact of the two Crisis types on these DVs was evaluated using the effect size statistic, partial eta squared, which represented the proportion of the variance in the dependent variable explained by the independent variable (Pallant, 2001). As the Locus Crisis had two levels (with lower scores reflecting a more internal crisis and higher scores reflecting the more external crisis), the differences in results were identified using estimated marginal means. The results, shown in Table 24, indicated that Locus Crisis significantly impacted the
locus attribution, the internally controllable attribution, responsibility, accountability and anger.

Table 24 Dependent variables exhibiting significant differences for Locus Crisis after Bonferroni adjustment

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Locus Crisis</th>
<th>ANOVA results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal</td>
<td>External</td>
</tr>
<tr>
<td>Locus attribution</td>
<td>2.57</td>
<td>3.58</td>
</tr>
<tr>
<td>Int cont attribution</td>
<td>5.43</td>
<td>4.75</td>
</tr>
<tr>
<td>Responsibility</td>
<td>5.31</td>
<td>4.65</td>
</tr>
<tr>
<td>Accountability</td>
<td>5.37</td>
<td>4.56</td>
</tr>
<tr>
<td>Anger</td>
<td>4.38</td>
<td>3.92</td>
</tr>
</tbody>
</table>

While the MANOVA results allowed rejection of the null hypothesis that the group means were equal for the Controllability Crisis, they did not pinpoint where the significant differences lay when there were more than two groups (Hair et al., 1998). As a result, following the Bonferroni adjustment, further analysis was required using an ANOVA with post-hoc testing for each of the three dependent variables identified: the internally controllable attribution, responsibility and sympathy. A more conservative alpha was not set as only the externally controllable attribution violated Levene’s test of Equality of Error Variances, and this was not tested. Results indicated that the controllable crisis significantly differed from the uncontrollable and ambiguous crises, although the uncontrollable and ambiguous crisis did not differ (see Table 25, or for full written results, see Appendix 6.6).

Table 25 Dependent variables exhibiting significant differences for Controllability Crisis after the Bonferroni adjustment

<table>
<thead>
<tr>
<th>Controllability Crisis</th>
<th>ANOVA results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DF</td>
</tr>
<tr>
<td>Int cont attribution</td>
<td>2.308</td>
</tr>
<tr>
<td></td>
<td>5.529</td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>Sympathy</td>
<td>3.320</td>
</tr>
</tbody>
</table>
Interpreting results.

In the Locus Crisis type, the internal crisis scored higher for accountability, responsibility, anger and degree of internal controllability, while the external crisis was perceived as more external than the internal Crisis. As the means plots (see Appendix 6.7) showed, participants held the company more accountable for the internal crisis than for the external crisis. Participants made attributions that the internal crisis was more internal than the external crisis and that the internal crisis was significantly more internally controllable by the company than was the external crisis. Participants rated the company as significantly more responsible for the internal crisis than for the external crisis, and were significantly more angry about the internal crisis than about the external crisis.

For the Controllability Crisis, participants made attributions that the controllable crisis was significantly more internally controllable than were the uncontrollable and ambiguous crises; participants saw companies as being significantly more responsible for the controllable crisis than for the uncontrollable and ambiguous crises, and felt significantly less sympathy for the company when the crisis was controllable, rather than when the crisis was uncontrollable or ambiguous. This is evident in the means plots (see Appendix 6.8). However, there was no significant difference in means between the uncontrollable and the ambiguous crises. Thus the ambiguous crisis type did not add to the solution and was removed from further testing.

Summary.

The results of testing the two Crisis types, Locus and Controllability on the centroid obtained for the hypothesized dependent variables of attributions of locus, internal controllability, responsibility, accountability, emotions (anger, fear, sympathy, joy, surprise) and behaviour (withdrawal of custom, word-of-mouth, complaining and loyalty) indicated that there was no interaction effect between the two Crisis types, although there were statistically significant a main effect found for each Crisis type, as predicted. In the internal crisis, participants attributed the crisis to more internal and more internally controllable causes, rated the company as more responsible and accountable, and felt more anger towards companies than for the external crisis. Participants rated the controllable crisis as more internally controllable by the company, saw the company as more responsible for the crisis and felt less sympathy towards the company than for the uncontrollable or ambiguous crises.
Test 6. Testing the Impact of the Demographic Variables on the Dependent Variables

A number of demographic variables (culture, gender, age, education and income) and variables of mood and Negative Affectivity were measured as they were hypothesized to impact dependent variables of emotions and behaviours. However, examination of results showed that, due to the homogeneous nature of the sample of university students, age, education and income levels showed little variability. Therefore only the impact of mood, NA, PA, culture and gender was examined.

A variable needs to be continuous in order to testing the impact of the variable as a covariate. Therefore only mood, NA and PA could be tested as covariates. Hair et al. (1998) recommended examining the analysis without covariates, which has already been conducted, and with covariates.

**MANCOVA and its assumptions.**

MANCOVA is viewed as the variance in the dependent variables not explained by the covariates (Hair et al., 1998). Metric covariates remove extraneous influences from the dependent variable, thus increasing the within-group variance (Hair et al., 1998). An effective covariate is highly correlated with the dependent variable but not with the independent variable (Hair et al., 1998). As recommended by Hair et al. (1998, p. 347) “too powerful” covariates are eliminated as the covariate is extracted first, thus any variation associated with the covariate is not available for the independent variables.

Specifically, for Negative Affectivity and Positive Affectivity, congruent with Affective Events Theory, it had been predicted that the higher the NA, the more negative the reported emotions, while the higher the PA, the less negative the reported emotions. In addition, those in a negative mood would experience stronger negative emotions (anger, fear, sadness) than would those in a positive mood. As well, negative mood was considered to influence processing strategy and thus secondary attributions. High NA and high PA and referred to scores in the top quartile of distribution, while high negative mood referred to scores in the lowest quartile of distribution.

MANCOVA’s first assumption is reliability of the covariates, as evidenced by scale reliability. Mood, PA and NA were measured on internally consistent scales with mood showing a reliability of .83, the PA scale showing .90, and NA showing .82. MANCOVA also assumes that there are no strong correlations between the covariates. However, Pearson
product-moment correlation coefficients showed that mood, NA and PA were significantly correlated at the .01 level (see Appendix 6.10).

Additionally, MANCOVA assumes (i) that there are linear relationships between the dependent variables and each covariate and (ii) that there are linear relationships between each of the pairs of the covariates (Tabachnik & Fidell, 2001), both requiring testing for each level of the independent variables. As a result, the relationship between NA and emotions, PA and emotions and mood and emotions was investigated using scatterplots against different levels of the predicted dependent variables. However, there were no significant correlations and no linear relationships between these constructs and emotions. In addition, mood had no significant correlation and no linear relationship with attributions of locus, internal controllability and external controllability. Due to this failure of the predicted relationships, these variables were removed from further testing.

Relationship between gender, culture and the variables of emotions and behaviour.

The relationships between gender and emotions and behaviour, and between culture and attributions, emotions and behaviour was investigated. As gender and culture were categorical variables, T-tests, ANOVAs and MANOVAs were used. As no relationship had been predicted between gender and culture, a one-way MANOVA was used. Results indicated no main effect for gender, although there was a main effect for culture. As the sample size was unequal for collectivists (n = 47) compared with individualists (n = 242), Pillai’s trace was used, $F(12,276) = 1.875$, $p < .05$. Following a Bonferroni adjustment (.05/12 = .004), only complaining showed a significant effect for culture, with collectivists more likely to complain ($M = 3.21$, $SD = 1.74$) than individualists ($M = 2.49$, $SD = 1.51$), which was an unexpected finding.

Test 7: Other Manipulation and Realism Checks

There were several manipulation checks (all measured on 7-point scales) designed to examine the degree of severity of the crash, whether participants thought this was a realistic situation and whether they were able to imagine that this sort of situation could happen to them or to those close to them.

Respondents regarded the death toll (33 killed out of 49, including six in a critical condition) as fairly high ($M = 5.07$, $SD = 1.67$), thought the scenarios were realistic ($M = 5.47$, $SD = 1.21$) and could easily imagine that this situation could happen to them or to those close to them ($M = 5.02$, $SD = 1.21$). As a medium death toll had been aimed for, follow-up
interviews with respondents indicated that the proportion of deaths to survivors needed to be increased in Study 3.

Summary Of Results and Recommended Changes to the Questionnaire for the Study 3 and Further Testing

It was recommended that further testing and a number of changes to the questionnaire be conducted as a result of the findings from Pilot Study 1. The first recommendation involved dropping a number of variables from further analysis (see Table 26).

Table 26 Dependent variables dropped from further analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreseeability</td>
<td>In EFA very low communality; did not load on any factor</td>
</tr>
<tr>
<td>Intentionality</td>
<td>In EFA very low communality; did not load on any factor</td>
</tr>
<tr>
<td>Emotion: Love</td>
<td>Did not show up as a separate factor in EFA</td>
</tr>
<tr>
<td>Behaviour: contagion</td>
<td>IN EFA, low communality; did not load on any factor</td>
</tr>
<tr>
<td>Behaviour: information-seeking</td>
<td>In EFA, low communality; showed as complex item</td>
</tr>
<tr>
<td>Mood</td>
<td>No linear relationship or significant correlations with emotions or attributions</td>
</tr>
<tr>
<td>NA</td>
<td>No linear relationship or significant correlations with emotions</td>
</tr>
</tbody>
</table>

For the Controllability Crisis, there was insufficient differentiation between the uncontrollable and ambiguous causes, requiring that the ambiguous crisis be dropped from further testing.

There was no main effect for Account on the hypothesised dependent variables. Four possible causes for Account failure were considered: (i) poor operationalisation so that the different accounts were not perceived in the intended way; (ii) that Crisis types received more cognitive processing than did Account. This may have been due to the high perceived proportion of deaths from the plane crash (33 dead, six critical, 10 unharmed), as follow-up interviews revealed comments that the plane obviously wasn’t fully laden, with the number of people on the plane considered to be low. Extra cognitive processing may have been due to using a manipulation check for Crisis types, but not for Account; (iii) lack of Account credibility; (iv) that there was a primacy effect operating. In a primacy effect, the impact of the initial information dominates later information as decreased attention is paid to the later information (Gross, 1992). This may have occurred as the crisis news story appeared two
pages before the Account news story, was larger and contained a photograph. Follow-up
discussion with respondents indicated that they paid far less attention to the Account than to
the newspaper story about the Crisis.

Pilot 2: Adjustment and Testing of Account

To combat the failure of Account, several steps were taken: (i) to combat potentially
poor operationalisation of Account, all accounts were adjusted so that they were based on the
degree of responsibility accepted by the company from none in “denial”, to full acceptance in
“confession” (see Appendix 6.11). In the literature review, it was noted that Account included
a responsibility component – e.g., Weiner (1995b) noted that responses could be seen as
having responsibility stages, while Jorgensen (1996) used responsibility level as his
manipulation check for Account. To test whether Account was perceived in the intended way,
while at the same time, (ii) to increase the level of cognitive processing of the Account, an
Account manipulation check was created (see Appendix 6.12). In addition, as the number of
deaths was considered proportionately high, potentially increasing the cognitive processing of
the Crisis types and overwhelming the Account, the dead to survivor ratio was increased,
with passenger numbers increased to 75 (33 dead, 42 survivors); (iii) to test the credibility of
each Account, I added a 3-item credibility scale by Kent and Allen (1994) (see Appendix 6.13
for details); (iv) two steps were taken to minimize the primacy effect regarding the
sequencing of the news stories as, by necessity, Accounts needed to appear after the news
story in which each Crisis type was embedded. First, each crisis news story was slightly
shortened to allow an Account summary to be placed in a sub-heading at the base of each
story (for an example, see Appendix 6.14); second, the Account stories were moved opposite
the crisis news stories.

To test these changes, a shortened version of the questionnaire was developed,
including only the main dependent variables: attributions, emotions and behaviour. This new
questionnaire included the alterations to the emotion and behaviour scales from Pilot 1 and a
new final section to allow for comments about the Account plus any further comments. As
Account had five levels (no comment, denial, excuse, justification, confession) and there were
two levels each of Locus Crisis (internal, external) and Controllability Crisis (controllable,
uncontrollable) this was a 5 x 2 x 2 between-subjects design.
Because this small-scale study primarily tested Account, the sample size was 60, again taken from the student population, allowing three participants per treatment and 12 participants per Account level. Pilot 2 also allowed for small-scale testing of the adjusted emotion and behaviour scales and further testing of attributions, which had received minor adjustments for clarity.

Assumptions of Normality

After initial data cleanup, for each variable in the ungrouped data, checks were made for outliers, univariate assumptions of normality (skewness and kurtosis), linearity and homoscedasticity. Missing data was below the 5% area of concern (see Appendix 6.15).

Summated Scales

As Tabachnik and Fidell (2001) recommend a minimum of 300 cases for factor analysis, due to the small sample size, no factor analysis was conducted. However, the scales were analysed for internal reliability, as the credibility scale was newly added, the emotion and behaviour scales had been adjusted (some with new items added), while the attribution scales received slight revision for clarity.

Examination of Kent and Allen’s (1994, in Bruner II et al., 2001) credibility scale showed that it had reasonable internal consistency, with a Cronbach’s alpha of .72, albeit lower than the researchers’ results which had a Cronbach’s alpha above .85.

Examination of the three attribution scales showed that the locus scale had a Cronbach’s alpha of .71 (.68 in Pilot 1 with \(n = 316\)), the internally controllable scale had a Cronbach’s alpha of .68 (.82 in the Pilot 1) and the externally controllable scale had an alpha of .73 (.74 in Pilot 1), indicating reasonable internal consistency.

Examination of the emotion scales (anger, sympathy, joy, surprise, fear) showed that anger had a Cronbach’s alpha of .85 (.86 in Pilot 1); sympathy had a Cronbach’s alpha of .79 (.73 in Pilot 1); joy had a Cronbach’s alpha of .81 (.83 in Pilot 1); surprise, with its two extra items (astonished, astounded), had a Cronbach’s alpha of .73 (.68 in Pilot 1); and fear had a Cronbach’s alpha of .88 (.93 in Pilot 1). These results indicated that the scales had good internal consistency, although lower than in Pilot 1, so no further scale reduction was carried out. These scales were therefore retained without further changes for the main study, Study 3.
Examination of the behavioural intent scales (complaining, withdrawal of custom, loyalty, word-of-mouth activity) showed that the complaining scale had a Cronbach’s alpha of .93 (.93 in Pilot 1); the withdrawal of custom scale had a Cronbach’s alpha of .77 (.87 in Pilot 1); the loyalty scale had a Cronbach’s alpha of .78 (.93 in Pilot 1); The 2-item word-of-mouth scale had five new items added from existing scales (see Appendix 6.16 for selection details): two new positive WOM items (“recommend D.A. to friends or family”, “tell others mostly positive things about D.A.”), two new negative WOM items (“tell others how badly you thought of D.A.”, “tell others mostly negative things about D.A.”) and one new WOM activity item (“discuss this with others”). Cronbach’s alpha for this new WOM scale was .43. In Pilot 1, the positive WOM items loaded on loyalty and the negative WOM items loaded on withdrawal of custom, leaving two items identified as “WOM activity”, which had a Cronbach’s alpha of .72. In Pilot 2, when the three “WOM activity” items were separately analysed (with positive and negative WOM items removed), Cronbach’s alpha improved to .69 (.72 in Pilot 1 with two items). All items were necessary for this level of reliability. As Pilot 1’s EFA found positive WOM loaded with loyalty and negative WOM loaded with withdrawal of custom, I tested adding the Pilot 2 positive WOM items to loyalty and the negative WOM items to withdrawal of custom scales finding, congruent with Pilot 1, that they improved these constructs Cronbach alphas. The two positive WOM items improved Cronbach’s alpha of the loyalty scale from .78 to .85, while the two negative WOM items improved Cronbach’s alpha of the withdrawal of custom scale from .77 to .87. As positive and negative WOM are consistently held by researchers to be separate constructs to customer loyalty and withdrawal behaviours, the new positive and negative WOM items were deleted and for Study 3, new items located. While results indicated that WOM activity constituted a separate construct to positive and negative WOM behaviour, as this was considered to be “neutral” behaviour, the decision was made to remove it from further testing as it would not add to theory development and testing.

Testing Manipulation Checks

Account Manipulation Check

As the main purpose of Pilot 2 was to check whether Account was perceived as intended, a chi-square test for independence was conducted to examine the effect of Account (five levels) against the Account manipulation check (five levels).

The assumption regarding minimum expected cell frequency of five or greater was violated, as due to the sample size, all 25 cells had an expected count of less than five. The Pearson Chi-square value was 68.10 ($p < .001$), indicating that the accounts were significantly
different. A check of the cross-tabulation indicated that 66.7% (8 of 12 participants) who viewed the account of “no comment” perceived it as “no comment”; 75% (9 of 12 participants) viewed “denial” as “denial”; 50% (6 of 12 participants) viewed “excuse” as “excuse”; 41.7% (5 of 12 participants) viewed “justification” as “justification” and 58.3% (7 of 12 participants) viewed “confession” as “confession”. While each account scored the highest in its category, results showed that participants were most likely to view accounts as “denial” (30% of all accounts) or “no comment” (26.7% of all accounts). This may perhaps have been due to ordering effects as the question ordering was “no comment” first, then “denial”, “excuse”, “justification” and “confession”. While all results were significant, the low overall scores indicated that the accounts, particularly “excuse”, “justification” and “confession”, required further clarification to ensure that they were perceived in the intended way.

Credibility of Account

The credibility of the different accounts was checked using a one-way ANOVA. There was no statistically significant difference (p < .05) in scores for the five accounts, indicating no difference between their perceived credibility. With means ranging from 3.2 to 4.4 on a 7-point scale, this indicated that participants found the results moderately credible. The means plot (see Appendix 6.17) provided some indication that overall, “confession” was considered most credible of all responses and “denial” the least credible. As some accounts would “fit” their scenarios better than others, a 3-way ANOVA was run to check credibility of each account according to its crisis type. However, there were no significant main or interaction effects, although results were generally in the expected direction (that is, “confession” was considered most credible, followed by “justification”, “excuse”, and “denial”). In contrast, “no comment” performed better than “denial”, on par with “excuse”.

Manipulation Check for Crises

To check the effectiveness of the different crisis scenarios, I compared the scores for the different crisis types against their manipulation checks.

Using an independent t-test I compared Locus Crisis (internal and external) scores on the manipulation check for internal/external. There was a significant difference in scores for the internal (M = 2.23, SD = 1.25) and external (M = 3.43, SD = 1.50) crisis types. The magnitude of the difference in the means was large (eta squared = .16).
Using an independent t-test, I compared Controllability Crisis (controllable and uncontrollable) scores on the manipulation check for controllable/uncontrollable. There was a significant difference in scores for the controllable ($M = 5.37, SD = 1.69$) and uncontrollable ($M = 4.34, SD = 1.76$) Crisis types. The magnitude of the difference in the means was moderate ($\eta^2 = .08$).

This indicated that, congruent with Pilot 1 findings, participants differentiated between the different levels of the Locus and Controllability crises. However, compared with Pilot 1, the means for the Locus Crisis were a little lower, while those for the Controllability crises were much higher, although results could have been affected by sample size.

**Testing for Impact of Independent Variables**

As the sample was very small, no interaction effects were examined. Instead, a main effect were examined for Account and Crisis types using MANOVA. Although a sample size of 20 per cell ensures robustness (Tabachnik & Fidell, 2001), the sample per cell was 12.

**Multivariate Assumptions of Normality**

Univariate assumptions of normality had already been tested. Testing for multivariate normality started with estimates of the Mahalanobis distance to check for multivariate outliers. The maximum Mahalanobis distance was 27.269 with 13 degrees of freedom, which was less than the critical value of 34.528 (Tabachnik & Fidell, 2001), indicating there were no multivariate outliers.

To examine linearity, scatterplots were generated for the combinations of the variables. While there were more linear scatterplots than for the unsummatated data, there was still some heteroscedasticity. While the Pearson Correlation coefficient showed correlations significant at the .05 and .01 level, none approached the area of concern, thus there was no multicollinearity or singularity evident.

**Testing the Impact of Account**

A factorial between-groups MANOVA was conducted to investigate the impact of the adjusted accounts on the dependent variables of credibility, attributions, emotions and behaviour. There was no main effect, indicating that the adjusted Accounts had no impact on the combined dependent variable.
Levene’s test of equality of error variances was not violated for any of the dependent variables, indicating that all cells had equal variance. Pillai’s Trace, which is more robust with small sample sizes (Pallant, 2001) was examined and showed there was no statistically significant difference between Accounts on the combined dependent variables: \( F(52,156) = 1.03, \ p = .445 \), Pillai’s Trace = 1.017, with a partial eta squared = .97.

Testing the Impact of Crisis types

A factorial between-groups MANOVA was conducted first to investigate the impact of the Locus Crisis, and second, to determine the effect of the Controllability Crisis on the dependent variables of credibility, attributions, emotions and behaviour. There was a main effect for each Crisis type, confirming the results for Pilot 1. No interaction effects were examined due to the sample size.

For the Locus Crisis, Box’s M test showed no violation of the assumption of homogeneity of variance \( (p = .171) \) and Levene’s Test showed no violation of the assumption of equality of variance for any of the dependent variables. There was a significant difference in the two levels, \( F(13, 39) = 2.70, \ p = .008 \). Due to the small sample size, Pillai’s Trace was used = .474, partial eta squared = .474.

For the Controllability Crisis, Box’s M test showed no violation of the assumption of homogeneity of variance \( (p = .755) \) and Levene’s test showed no violation of the assumption of equality of variance for any dependent variable, except for surprise \( (p = .003) \). There was a significant difference in the two levels, \( F(13, 39) = 2.21, \ p = .028 \), Pillai’s Trace = .425, partial eta squared = .995.

Normally, after finding that the crises differed on the composite dependent variable, the next step would be to determine which variables contributed most to the overall difference. However, this step was not taken, as the purpose of the testing was to focus on Account types.

Discussion

As Account showed no main effect in Pilot 1, the main purpose of Pilot 2 was to remedy potential confounds that may have impacted the effectiveness of Account. However, results were congruent with Pilot 1 findings, showing that Account did not have a main effect on dependent variables, despite being perceived in the intended manner. Additionally, as per Pilot 1, Pilot 2 showed that the different Crisis types had a main effect, with significant
differences evident on the composite variable. In other words, it was Crisis type and not Account that impacted the dependent variables.

Earlier, four possible causes were considered for Account’s failure to have a main effect on the dependent variables: (i) poor operationalisation of Account so that each account was not perceived in the intended way (ii) extra cognitive processing of crisis types due to the use of a manipulation check, (iii) lack of Account credibility, or (iv) a primacy effect operating resulting in a stronger focus on the crisis cause in the news story.

Results from Pilot 2 showed that there was increased cognitive processing due to the manipulation check, as evidenced by the comments made about the Accounts. In total, 45% of the sample (27 participants) volunteered comments about the Account they received, indicating that they had paid attention to the Account and potentially conducted more cognitive processing of the Account than did participants in the earlier study. “Denial” and “no comment” received seven comments, “excuse” and “justification” six each, with one comment made about “confession”. In addition, all accounts were considered to be reasonably credible.

Primacy effect was potentially reduced by including the sub-heading in the main Crisis type story and relocating the Account news story opposite it.

However, it was possible that Account was still poorly operationalised, or that the manipulation check was faulty. Consideration was also given to other possibilities apart from faulty operationalisation: (i) that Account had less impact than hypothesized and that, instead, Crisis type determined main consumer response; (ii) that a primacy effect was still occurring, with participants’ focus remaining on the Crisis scenario in the main story, rather than on the Account that followed this scenario. Further consideration and implications for changes to the questionnaire are next discussed.

9 For “denial”, typical comments cited the lack of sympathy in the CEO response; for “no comment”, that it was expected, but irresponsible; for “excuse”, that it was inappropriate and lacking in sympathy; for “justification”, that it was not sympathetic enough; for “confession”, that sympathy wouldn’t help and that taking responsibility would incite anger in the families.
(i) Crisis Type Determined Consumer Response, Not Account

While Pilots 1 and 2 showed no main effect for Accounts, crisis studies (earlier discussed in Chapter 2) by Jorgensen (1996) demonstrated that Accounts impacted consumer outcomes such as emotions and behaviour, while Griffin et al. (1991) showed that Accounts impacted attitudes and Kaman Lee (2004) demonstrated that Accounts impacted sympathy, trust and responsibility. As a result, the conclusion was that Account was still poorly operationalised and needed revision.

(ii) A Primacy Effect was still Occurring

The impact of the Crisis type news story may still have dominated Account despite the inclusion of an Account sub-heading in the story and the relocation of the Account story opposite. A feedback session with groups of participants indicated that the Crisis type scenarios were viewed as high impact and that Crisis overwhelmed Account. One participant said, “it didn’t matter what the company said, it was just spin-doctoring” - a view shared by other participants.

Participants had also potentially paid more attention to the newspaper story as it included a large photograph of the plane crash. In Jorgensen’s (1996) experiment, in which Accounts of “denial” and “no comment” had a significant impact, and in Kaman Lee’s (2004) quasi-experiment, no mention was made of use a newspaper photograph.

Additionally, the fundamental attribution error may have occurred. This attributional error refers to the fact that our ability to accurately assign or recall non-causal factors (including mitigating factors) in the face of immediately available information is limited (Weinberger, 1986). Weinberger found that this was especially applicable when media coverage of the negative outcome was accompanied by graphic video images. The implication is that, even if participants successfully received the organisation’s account and recognised that there were mitigating circumstances that weakened the linkage between the organisation and the negative outcome, due to attributional error, the vividness of the negative information may have dominated. Thus use of a large photograph depicting a plane crash and a statement that 33 people were killed could have dominated participants’ attention. Therefore testing of the photo and a lower injury level was required.

However, before any testing of photograph impact and injury level, it was first necessary to ensure that the operationalisation of Accounts and the manipulation checks was accurate.
Pilot 3: Accounts and Manipulation Check Testing

As either the Account or the Account manipulation checks may have been faulty in Pilot 2, the decision was made to adjust and further test Account in a small-scale study against two Account manipulation checks, one adjusted and one new.

Accounts of “excuse” and “justification” were adjusted, and two “confession” versions created (see Appendix 6.18). In Pilot 2, the Account manipulation check required the selection of one statement from a choice of five responsibility-based Account descriptors (see Appendix 6.12). This was somewhat unsuccessful. In Pilot 3, the five Account descriptors were turned into a 5-item scale, with some changes made for clarity. Participants were asked to comment on the extent that each statement matched the CEO’s statement using a 7-point Likert scale anchored by “not at all” and “very much”. Additionally, a new 1-item Account manipulation check was created based on a statement summary (see Appendix 6.19 for both scales). Both of these manipulation checks were ordered differently to the manipulation check in Pilot 2 and separated by a space allowing for comment on the Account. The Crisis type news story was left as it was, that is, containing the Account summary in a sub-heading at the base of the page as per Pilot 2. Two crash severity measures were used.

The sample consisted of 48 undergraduate students. As Account had six levels (no comment, “denial”, “excuse”, “justification”, “confession 1”, and “confession 2”) and each Crisis type had two levels, this was a 6 x 2 x 2 between-subjects design, allowing two participants per treatment and 8 participants per Account type. There were no missing data.

(i) Responsibility-based Account Manipulation Check

Assumptions of normality were first assessed. There were more cases in each cell (eight) than there were dependent variables (five). An analysis showed no univariate outliers. The critical value with five dependent variables was 20.515 and the maximum Mahalanobis distance was 13.548, indicating there were no multivariate outliers. As the independent variable, Account, had six levels for this test and there were five dependent variables consisting of scaled descriptors for Accounts of “no comment”, “denial”, “excuse”, “justification” and “confession”, a one-way MANOVA was used.

The result of Box’s M test showed that the assumption of homogeneity of variance-covariance matrices was not violated \((p > .001)\). Levene’s test of equality of error variances was violated for all variables \((p < .05)\), indicating that all cells did not have equal variances.
Pillai’s Trace, which is more robust with small sample sizes (Pallant, 2001) showed that there was a statistically significant difference between Accounts on the combined dependent variables $F(25, 210) = 6.15, p < .001$, Pillai’s Trace = 2.11, partial $\eta^2 = .94$.

After finding that the groups differed, it was necessary to determine which variables contributed most to the overall difference by investigating the results of tests of between-subjects effects using a post-hoc procedure. Using a Bonferroni adjustment to reduce the chance of a Type 1 error, alpha was set to a more stringent level of .01 (.05/5 dependent variables). On the tests of between-subjects effects, all Accounts were significant ($p < .001$). Follow-up one-way ANOVAs using Tukey’s HSD were used as a post-hoc test to find where significant differences lie for the Accounts. Because Levene’s test was violated for all variables, a more conservative alpha of .01 was set in the univariate F-test (Pallant, 2001; Tabachnik & Fidell, 2001).

For the manipulation check of “no comment”, there was a statistically significant difference at the $p < .05$ level in scores (see Table 27). Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “no comment” was significantly different from “confession 1” and “confession 2” (see Appendix 6.20.1 for the means plot showing impact of Account on “no comment”). For the manipulation check of “denial”, there was a statistically significant difference at the $p < .05$ level in scores (see Table 27). Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “denial” was significantly different from “no comment”, “confession 1” and “confession 2” (see Appendix 6.20.2 for the means plot). For the manipulation check of “excuse”, there was a statistically significant difference at the $p < .05$ level in scores (see Table 27). Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “excuse” was significantly different from “no comment”, “confession 1” and “confession 2” (see Appendix 6.20.3 for the means plot). For “justification”, there was a statistically significant difference at the $p < .05$ level in scores (see Table 27). Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “justification” was significantly different from “no comment”, “denial”, “excuse” and “confession 1” (see Appendix 6.20.4 for the means plot). For “confession 1”, there was a significant difference at the $p < .05$ level. Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “confession 1” was significantly different from “no comment” and “denial” (see Appendix 6.20.5 for the means plot). For “confession 2”, there was a significant difference at the $p < .05$ level in scores. Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “confession” 2 was significantly different from “no comment”, “denial”, and “justification” (see Appendix 6.20.5 for the means plot).
Results indicated that while many Accounts were successful, participants found it difficult to differentiate between Accounts of “no comment”, and those of “excuse” or “justification”; between “denial”, and those of “excuse” or “justification”; between “excuse” and “denial”; between “justification” and “confession 2”; between “confession 1” and “excuse”; between “justification” and “confession 2”; and between “confession 2” and “excuse” or “confession 1”. While there was improved differentiation between the Accounts using the 5-item manipulation check rather than the Pilot 2 1-item measure, results indicated a problem using a responsibility-based manipulation check for Accounts.
Table 27 Pilot 3 Cell means, Standard Deviations and ANOVA results for the Impact of Account on Dependent Variables

<table>
<thead>
<tr>
<th>DV</th>
<th>No Comment</th>
<th>Denial</th>
<th>Excuse</th>
<th>Justification</th>
<th>Confession 1</th>
<th>Confession 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 8</td>
<td>n = 8</td>
<td>n = 8</td>
<td>n = 8</td>
<td>n = 8</td>
<td>n = 8</td>
</tr>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>No Comment</td>
<td>6.00 a</td>
<td>1.69</td>
<td>4.63</td>
<td>2.33</td>
<td>5.88 1.13</td>
<td>5.50 1.31</td>
</tr>
<tr>
<td>Denial</td>
<td>3.38 b</td>
<td>1.85</td>
<td>6.62 a</td>
<td>0.52</td>
<td>4.50 1.93</td>
<td>4.38 1.60</td>
</tr>
<tr>
<td>Excuse</td>
<td>1.62 b</td>
<td>0.74</td>
<td>3.88</td>
<td>1.81</td>
<td>5.75 a 1.98</td>
<td>2.63 2.07</td>
</tr>
<tr>
<td>Justification</td>
<td>1.12 b</td>
<td>0.35</td>
<td>1.50 b</td>
<td>0.76</td>
<td>1.88 b 1.36</td>
<td>5.00 a 2.33</td>
</tr>
<tr>
<td>Confession 1</td>
<td>1.63 b</td>
<td>1.06</td>
<td>1.00 b</td>
<td>0.00</td>
<td>2.00 2.07</td>
<td>1.88 1.25</td>
</tr>
<tr>
<td>Confession 2</td>
<td>1.63 b</td>
<td>1.06</td>
<td>1.00 b</td>
<td>0.00</td>
<td>2.00 2.07</td>
<td>1.88 b 1.25</td>
</tr>
</tbody>
</table>

* indicator variable that is significantly different from b variables at the p < .05 level;
(ii) Account Manipulation Check – 1-item Measure.

With this manipulation check, participants selected one Account that most closely matched the CEO’s comments in the Account news story. The Account ordering was changed from that used in Pilot 2.

As both independent and dependent variables were categorical, a chi-square test for independence was conducted to examine the effect of the Account (six levels, including “confession 2”) against the Account manipulation check (five levels). The assumption regarding minimum expected cell frequency of five or greater was violated, as due to the sample size, all 30 cells had an expected count of less than five. The Pearson Chi-square value was 122.36 ($p < .001$), indicating that the Accounts were significantly different. Using a check of the cross-tabulations, results were compared with those for Pilot 2’s 1-item responsibility-based manipulation check. See Table 28.

<table>
<thead>
<tr>
<th>Account</th>
<th>Pilot 3</th>
<th>Pilot 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Comment</td>
<td>87.5% (7 of 8)</td>
<td>66.7%</td>
</tr>
<tr>
<td>Denial</td>
<td>75.0% (6 of 8)</td>
<td>75.0%</td>
</tr>
<tr>
<td>Excuse</td>
<td>100% (8 of 8)</td>
<td>50.0%</td>
</tr>
<tr>
<td>Justification</td>
<td>62.5% (5 of 8)</td>
<td>41.7%</td>
</tr>
<tr>
<td>Confession 1</td>
<td>87.5% (7 of 8)</td>
<td>58.3%</td>
</tr>
<tr>
<td>Confession 2</td>
<td>75.0% (6 of 8)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

While it appears that “justification” could still be improved, results indicated that Pilot 3’s 1-item manipulation check was more effective than the 1-item check used in Pilot 2. However, there were still some ordering effects with the first response (excuse) receiving 31.3% of all responses as opposed to an expected 16.7%. This ordering effect did not apply to the second Account of “confession”.

Interpreting the Results

The results suggested that the 1-item Account manipulation check was more effective than the 5-item responsibility-based manipulation check for Accounts, or that of Pilot 2’s 1-item responsibility-based manipulation check. This suggested that the operationalisation of the Account manipulation check as responsibility-based was not effective. Although Account
may indeed contain an inherent level of responsibility and even exist on a responsibility continuum, responsibility levels were not successful as a manipulation check for Accounts.

ANOVA results on Account manipulation check 1 indicated that “confession 1” was more successful than “confession 2” in being differentiated from other Accounts. Results using Account manipulation check 2 also confirmed this. Therefore, “confession 2” was discarded from further testing.

Discussion

Pilot 3 indicated that earlier manipulation checks were faulty, and resulted in a successful new 1-item Account manipulation check which showed a more successful result for Account. As a result, the adjusted 5-item Account manipulation check was dropped from further testing.

As previously suggested at the end of Pilot 2, the photograph of the plane crash may have caused Crisis type to overwhelm the Account, causing a primacy effect and potential fundamental attributional error due to the vividness of the negative information regarding 33 killed. As a result, testing of photograph and injury level impact was required.

Pilot 4: Testing of Injury Level, Photograph Impact and Account Manipulation Check

It was suspected that lack of main effect for Account in Pilot 1 may have been due to Crisis type overwhelming Account due to the shock power of the plane crash photograph and the impact of 33 killed in a believable scenario. Therefore, the decision was made to test the Crisis impact without the photograph, as well as to create and test a new low impact scenario, with 33 injuries and no deaths in Pilot 4. This required creation of a new harm manipulation check. In addition, the opportunity was taken to further test Account against an expanded manipulation check for Account.

Using only the internal and controllable Crisis type scenario, three different conditions were created for testing against impact manipulation checks: (i) a low injury situation using the photograph; (ii) a low injury situation without the photograph; (iii) a high injury situation without the photograph; (iv) the high injury scenario with the photograph had already been tested against a manipulation check in Pilot 1. The three treatments and the five Accounts used a 3 x 5 between-subjects design.

For the low impact news stories, the relevant body copy and sub-headings referring to 33 dead were adjusted accordingly to 33 injured, none seriously (For an example of the low-
impact, no photograph treatment, see Appendix 6.21). As the original manipulation check measuring level of perceived harm referred to “the number of deaths caused by this airline crash”, this was changed to “the number of critical injuries caused by this airline crash”. Additionally a new “severity of harm” measure was added. This was: “Considering the potential number of deaths that could occur with an air crash, how would you rate the severity of this crash?”

Pilot 4 also provided an opportunity to fine-tune the Account manipulation check. The successful 1-item Account check (providing a choice of one out of five Accounts) from Pilot 3 was converted to a 5-item scaled measure for each Account, anchored by the terms “not at all” and “very much” (see Appendix 6.22). The Account order was again changed. As “justification” was the least successful Account in Pilot 3, the statement used for this Account was slightly adjusted. Comments on the company Account were also solicited.

Testing the Scenario

The sample comprised 30 undergraduate students from the same sample pool as before, allowing 10 participants per treatment. There were no missing data. Assumptions of normality were first assessed. Checks for outliers and extreme scores were made using boxplots, revealing a number of outliers and extreme scores. However, examination of the means and the 5% trimmed means indicated little difference, indicating that outliers had little impact. As both ANOVA and MANOVA are sensitive to multivariate outliers, Mahalanobis distance was used to identify multivariate outliers. The maximum Mahalanobis distance was 9.62, much lower than the critical value of 20.52, indicating no multivariate outliers.

Impact of Photograph Use on Level of Harm

A one-way between-groups ANOVA was conducted to test the impact of treatments (i), low impact with photograph, (ii) low impact, no photograph, and (iii) high impact, without photograph, on each of the two manipulation checks, critical injury level and crash severity.

There was a statistically significant difference in scores for the three conditions on the critical injury manipulation check (see Table 29). The effect size, hand calculated using eta squared, was very large at .42. There was a significant difference between the high impact no photograph condition and both the low impact no photograph, and low impact with photograph, conditions. There was no significant difference between the low impact
conditions with or without the photograph. This is evident in the means plot (see Appendix 6.23).

There was a statistically significant difference \((p < .05)\) in scores for the three conditions on the crash severity manipulation check (see Table 29). The effect size, calculated using eta squared, was very large at .28. There was a significant difference between the high impact no photograph condition and the low impact with photograph condition, but not the low impact no photograph condition. There was no significant difference between the low impact conditions with or without the photograph. This is evident in the means plot (see Appendix 6.23). An examination of the means for both manipulation checks (see Table 29) indicated that the scenarios using the photograph actually lowered perceived injury levels and crash severity estimations. Additionally, Pilot 1 \((n = 316)\), which used a high impact scenario with a photograph, showed a lower mean \((M = 5.07)\) than did Pilot 4’s high impact scenario without photograph. Thus, the estimated impact was more severe when the photograph was not used, particularly for the high impact scenario. Therefore, the assumption that photograph use increased Crisis type impact evaluation via increasing estimated severity levels was not supported.

<table>
<thead>
<tr>
<th>Injury level and photograph treatment</th>
<th>ANOVA results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low impact</td>
<td></td>
</tr>
<tr>
<td>With photograph</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.00</td>
</tr>
<tr>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Low impact</td>
<td></td>
</tr>
<tr>
<td>No photograph</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.10</td>
</tr>
<tr>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>High impact</td>
<td></td>
</tr>
<tr>
<td>No photograph</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>6.00</td>
</tr>
<tr>
<td>SD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Critical injury level</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Crash severity</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.40</td>
</tr>
<tr>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Crash severity</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.90</td>
</tr>
<tr>
<td>SD</td>
<td></td>
</tr>
</tbody>
</table>

Account Manipulation Check

A one-way MANOVA was used to test the independent variable, Account (with five levels), against the manipulation check for Accounts using five scaled Account descriptors. The result of Box’s M test showed that the assumption of homogeneity of variance-covariance matrices was not violated \((p > .001)\). Levene’s test of equality of error variances was not violated \((p > .05)\) except for the first Account, “confession”, indicating that most cells did have equal variances. Pillai’s Trace, which is more robust with small sample sizes.
(Pallant, 2001), showed that there was a statistically significant difference between Accounts on the combined dependent variables $F(20, 96) = 3.18, p < .000$, Pillai’s Trace = 1.60, partial $\eta^2 = .40$.

After finding that the groups differed, the variables that contributed most to the overall difference were examined by investigating the results of tests of between-subjects effects using a post-hoc procedure. Using a Bonferroni adjustment to reduce the chance of a Type 1 error, alpha was set to a more stringent level of .01 (.05/5 dependent variables). On the tests of between-subjects effects, only “confession”, “excuse” and “justification” were significant ($p < .01$). A follow-up one-way ANOVA using Tukey’s HSD as a post-hoc test identified where significant differences lay for the Account manipulation checks – see Table 30.
<table>
<thead>
<tr>
<th>Account</th>
<th>No Comment</th>
<th>Denial</th>
<th>Excuse</th>
<th>Justification</th>
<th>Confession</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>No Comment</td>
<td>5.33</td>
<td>2.16</td>
<td>4.00</td>
<td>0.89</td>
<td>4.17</td>
</tr>
<tr>
<td>Denial</td>
<td>2.67</td>
<td>1.97</td>
<td>5.33</td>
<td>1.86</td>
<td>4.67</td>
</tr>
<tr>
<td>Excuse</td>
<td>3.17$^b$</td>
<td>1.72</td>
<td>5.67</td>
<td>1.51</td>
<td>6.33$^a$</td>
</tr>
<tr>
<td>Justification</td>
<td>1.67$^b$</td>
<td>0.82</td>
<td>2.83$^b$</td>
<td>1.72</td>
<td>2.17$^b$</td>
</tr>
<tr>
<td>Confession</td>
<td>1.50</td>
<td>0.84</td>
<td>1.33$^d$</td>
<td>0.52</td>
<td>1.00$^d$</td>
</tr>
</tbody>
</table>

$^a$ indicator variable that is significantly different from $^b$ variables at the $p = .05$ level;

$^c$ indicator variable that is significantly different from $^d$ variables at the $p = .01$ level;
While the Account of “no comment” received the highest mean score for the manipulation check for “no comment”, there were no significant differences between results (see means plot in Appendix 6.24.1). However, as this Account was listed last in the scale, placement may have affected results. The Account of “denial” received the highest mean score for “denial”, although there were no significant differences between results (see means plot in Appendix 6.24.2). The Account of “excuse” received the highest mean score for “excuse”, with a statistically significant difference at the $p < .05$ level on scores between “excuse” and “no comment” and “confession” (see means plot in Appendix 6.24.3). Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “excuse” was significantly different from “no comment” and “confession”. The Account of “justification” received the highest mean score for “justification” (see means plot in Appendix 6.24.4). There was a statistically significant difference at the $p < .001$ level between “justification” and all other results. Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “justification” was significantly different from all other results. The Account of “confession” received the highest mean score for “confession” (see means plot in Appendix 6.24.5). “Confession” had a statistically significant difference at the $p < .005$ level in scores between “confession” and “denial” and “excuse”, but not between “confession” and “no comment” or “justification”. Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “confession” was significantly different from “denial” and “excuse”.

Results indicated that each of the Accounts received the highest mean score on their respective 5-item scaled Account manipulation checks, although only the Accounts of “excuse”, “justification” and “confession” were significant. “Justification”, which previously showed least successful results on the manipulation check, was more successful in Pilot 4. As the “justification” Account was positioned last in Pilot 4 and second last in Pilot 3, this result did not appear to be have been produced by an ordering effect.

Discussion

The different mean scores for each manipulation check indicated that they did not measure the same construct. Pilot 4 results also indicated that the 5-item scaled manipulation check for Accounts had a lower success rate in differentiating Account types than did the 1-item check in Pilot 3. However, this will be retained. In addition, the previous 1-item Account manipulation check tested in Pilot 3 will be used for further research, but expanded into a 5-item check.
From Pilot 4 results, while the sample was very small for each condition \((n = 10)\), use of a crash photograph did not add to the impact of the Crisis type. In fact, photograph use resulted in lower levels of perceived harm, particularly for the high impact scenario. As the high impact scenario with 33 deaths was perceived as significantly different from the low impact scenario with 33 injuries, the conclusion was that level of harm, not photograph use, contributed to the dominance of Crisis type over Account. As a result, Level of Harm was added as a new independent variable to the existing IVs of Crisis type and Account for testing in Study 3. For Study 3, this results in a 5 x 4 x 2 factorial design (with five Accounts, four Crisis types and two Harm levels) with 40 treatment combinations, requiring a usable sample of 800 using Tabachnik and Fidell’s (2001) recommendation of a minimum 20 participants per cell to ensure robustness in a MANOVA.

Summary of Changes Resulting from Study 2 – Pilots 1, 2, 3, 4.

Results from the four pilot studies indicated changes to the operationalisation of the independent variable of Account (summarised in Table 31), to the manipulation checks (summarised in Table 32), to the measuring instruments, the scales (summarised in Table 33), and finally to the hypotheses.

Changes to the Independent Variables

In Pilot 1, Locus and Controllable Crisis types had been operationalised using plane crash scenarios. Results showed that, with the Controllability Crisis, participants had difficulty distinguishing between the uncontrollable and ambiguous situations. As a result, the ambiguous condition was dropped from further testing. Both Crisis types had a main effect on the dependent variables, but no interaction effects with Account.

In addition, from the results of Pilot 4 I added an extra independent variable, Harm, consisting of a high injury situation with 33 dead and a low injury situation with 33 slightly injured. It was predicted that Harm, like Crisis types, was likely to impact all the dependent variables. This resulted in the creation of a new hypothesis, Hypothesis 19, regarding the main effect of Harm, predicted to impact all dependent variables.
**Hypothesis 19: Harm level (main effect)**

The more severe the level of Harm in a hypothetical crisis event, the higher will be reported:

(a) involvement
(b) attributions of internality and controllability about the origins of the crisis cause and the lower the reported attributions of externality and controllability
(c) responsibility
(d) accountability
(e) negative consumer emotions, and the lower will be the reported positive emotions
(f) negative behavioural intentions, and the lower will be the reported positive behaviour
(g) negative attitude towards the company

Additionally, Harm was expected to interact with different Accounts and different Crisis types. Therefore, Hypothesis 1, which predicted the interaction of Crisis types and was extended:

**Hypothesis 1 extension: Impact of Accounts, Crisis type and Harm (interaction effect) on emotions, behaviours, attitude, responsibility and accountability**

Different accounts will be perceived as more effective, dependent upon the perceived origins of the different hypothetical Crisis types, and level of perceived Harm, resulting in less negative, or more positive consumer emotions, behavioural intentions, attitudes to the company and judgments of responsibility and accountability. Specifically, in a hypothetical crisis perceived to be:

(a) Internal and controllable and high harm, “confession”, then “justification” will result in less negative reported emotions, behaviours and attitudes, and lower judgments of responsibility and accountability.
(b) Internal and uncontrollable and low harm, “excuse” will result in less negative reported emotions, behaviours and attitudes, and lower judgments of responsibility and accountability.
(c) External and controllable and low harm, “excuse” will result in less negative reported emotions, behaviours and attitudes and lower judgments of responsibility and accountability.
(d) External and uncontrollable and low harm, “denial” will result in less negative reported emotions, behaviours and attitudes and lower attributions of responsibility and accountability.
The failure of the independent variable, Account, to have a main effect could have resulted from a number of causes and adjustments were made (see Table 31).

Table 31 Changes made to improve Account

<table>
<thead>
<tr>
<th>Potential Account confound</th>
<th>Tested in Pilot</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor operationalisation of Account in Pilot 1</td>
<td>2, 3</td>
<td>Accounts adjusted to reflect responsibility.</td>
</tr>
<tr>
<td>Low Account credibility</td>
<td>2</td>
<td>3-item credibility check added</td>
</tr>
<tr>
<td>Higher cognitive processing of Crisis types</td>
<td>2</td>
<td>Manipulation check for Account added</td>
</tr>
</tbody>
</table>
| Potential primacy effect                    | 2, 4            | - Account story changed to face Crisis stories  
|                                           | 4               | - Account sub-head included in Crisis news story  
|                                           | 4               | - Low injury situation with no deaths tested  
|                                           |                  | - Impact of airplane crash photo tested     |
| Poor Account manipulation check             | 3, 4            | Manipulation check reformulated from responsibility-based to Account-based. |

Changes and Additions to Manipulation Checks

Manipulation checks were tested, adjusted or created in Study 2 - see Table 32 for a summary of results.

Table 32 Adjusted manipulation checks

<table>
<thead>
<tr>
<th>Manipulation checks</th>
<th>Tested in Pilot study</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locus &amp; Controllability Crisis types</td>
<td>1</td>
<td>Retained as is.</td>
</tr>
<tr>
<td>Severity level</td>
<td>1, 4</td>
<td>- Used in Pilot 1 to test degree of severity of crash.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- In Pilot 4, due to decision to use two levels of harm (high/low), expanded to two questions of harm and critical injury, tested in Pilot 4. One item retained for Study 3.</td>
</tr>
<tr>
<td>Account</td>
<td>2, 3, 4</td>
<td>- Pilot 2’s responsibility-based check was unsuccessful;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pilot 3 successfully tested a 1-item measure.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pilot 4 expanded this 1-item into a 5-item measure.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Both measures retained for Study 3.</td>
</tr>
<tr>
<td>Credibility</td>
<td>2</td>
<td>New 3-item scale added after Pilot 1 as a manipulation check for Accounts. Scale alpha value was .72.  Retained without change for Study 3.</td>
</tr>
</tbody>
</table>
Changes to the Dependent Variables

Following Pilots 1 and 2, the measuring instruments for the dependent variables were changed, some contracts were deleted and most scales were altered - see Table 33.

<table>
<thead>
<tr>
<th>Construct tested</th>
<th>Pilot study</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood</td>
<td>1</td>
<td>No relationship with emotion or attributions as predicted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dropped from model and further testing.</td>
</tr>
<tr>
<td>NA and PA</td>
<td>1</td>
<td>No relationship with emotion as predicted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dropped from model and further testing.</td>
</tr>
<tr>
<td>Attribution: Foreseeability</td>
<td>1</td>
<td>Did not load on any factors in exploratory factor analysis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dropped from model and further testing.</td>
</tr>
<tr>
<td>Attribution: Intentionality</td>
<td>1</td>
<td>Did not load on any factors in exploratory factor analysis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dropped from model and further testing.</td>
</tr>
<tr>
<td>Accountability</td>
<td>1</td>
<td>In EFA, closely tied to internal controllability.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-item scale retained without change.</td>
</tr>
<tr>
<td>Involvement</td>
<td>1</td>
<td>10-item scale reduced to 4-item scale with an alpha of .91.</td>
</tr>
<tr>
<td>Responsibility</td>
<td>1</td>
<td>In EFA, loaded as a separate factor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3-item scale had alpha of .79. Scale retained without change.</td>
</tr>
<tr>
<td>Attitude</td>
<td>1</td>
<td>In FA, loaded on behaviour. Dropped from further analysis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New scale required for Study 3.</td>
</tr>
<tr>
<td>Attributions of locus, int. controllability and ext. controllability</td>
<td>1 &amp; 2</td>
<td>- Locus (3 item): alpha of .71 in Pilot 1; .68 in Pilot 2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Internally controllable (3-item): .82 in Pilot 1; .68 in Pilot 2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Externally controllable (3-item): .74 in Pilot 1; .73 in Pilot 2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scale retained without change.</td>
</tr>
<tr>
<td>Emotion to the company; Emotion towards using the service</td>
<td>1 &amp; 2</td>
<td>Six emotions tested in Pilot study 1. After EFA reduced to five, with most</td>
</tr>
<tr>
<td></td>
<td></td>
<td>scales reduced in size.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Anger (7-item): alpha of .86 in Pilot study 1; .85 in Pilot 2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fear (7-item): alpha of .93 in Pilot study 1; .88 in Pilot 2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Sadness renamed sympathy: alpha of .73 in Pilot 1 (3-item); .79 in Pilot 2 (4-item).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Joy (3-item): alpha of .83 in Pilot study 1; .81 in Pilot 2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Surprise: alpha of .68 in Pilot 1 (3-item); .73 in Pilot 2 (5-item).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>These scales were retained without further change.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Love (2 item): In the EFA, did not show up as a separate factor; one item loaded with joy, and one with sympathy items.</td>
</tr>
<tr>
<td>Behavioural intention</td>
<td>1 &amp; 2</td>
<td>- Complaining (4-item): alpha of .93 in Pilot 1; .93 in Pilot 2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Withdrawal of custom renamed from switching (5-item):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alpha of .83 in Pilot 1; .77 in Pilot 2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Loyalty (4-item): alpha of .93 in Pilot study 1; .78 in Pilot 2.</td>
</tr>
</tbody>
</table>
|                                      |             | - Word-of-mouth activity: alpha of .72 in Pilot 1 (2-items); alpha of .69 in Pilot 2 (3-item). Positive and negative WOM items failed and new items needed for Study 3. WOM activity deleted.
Limitations

One limitation was sampling bias through the use of a convenience sample of students. While non-probability sampling using a student population does not represent a valid substitute for more general populations (Lowry & Sundararaman, 2003), they are commonly used in research, particularly in pilot testing. Lowry and Sundararaman’s review of 508 empirical articles from four high-ranking marketing journals and four high-ranking communication journals found 59.3% of studies reported using non-probability sampling, with a large proportion of these using student populations.

In comparison to the general population sample used in Study 3, the student sample was younger, more educated and had a higher proportion of those in low income groups, as well as a higher number of those belonging to collectivist cultures, than the general population sample. This may have affected the pilot testing of constructs, possibly leading to their premature deletion, as well as affecting the development of instruments.

Issues of Validity, Reliability and Rigour

Some external validity was sacrificed by using a student sample for the pilot testing. However, the subjects were randomly assigned to different treatment groups. This disrupts any potential lawful relationship between the subjects and the variables (Fromkin & Streufert, 1976).

Extra internal control was gained in Study 2 in several ways. First there was systematic variation of the variables believed to cause a particular effect via use of the factorial design. Instrumentation problems were reduced by using one questionnaire only to test the dependent variables. As a quasi-control to delineate the effects of demand characteristics, participants were questioned as to what they perceived the experiment to be about and what they thought the experimenter hoped to find. The final question meant that if, participants detected the experimental hypothesis and responded in a congruent manner, then they were to be eliminated from the study. No participants were removed from the study for this reason. Realism of the scenario was also checked via two questions. As noted earlier in Pilot 1, participants thought that the scenarios were realistic ($M = 5.47, SD = 1.21$) and could easily imagine that this situation could happen to them or to those close to them ($M = 5.02, SD = 1.21$).
As the measures for the constructs were mostly compiled using previously tested scales (e.g., PANAS, mood, attitude, attributions), or through a compilation of items from tested scales (e.g., behaviour, involvement), the scales had been previously tested for construct validity. The exploratory factor analysis and post-hoc EFA showed that the measures had discriminant validity when tested against dissimilar constructs and convergent validity when measured with items on the same construct. Items that failed this assessment were deleted or replaced (e.g., the attitude scale that did not show discriminant validity, but instead clustered with behaviour items). The attribution, emotion and behaviour scales showed reasonable test-retest reliability when re-tested on a similar population sample. The internal consistency of the scales were reasonable to good, with all scales showing a Cronbach’s alpha ranging from .68 to .93 in Pilot 1, while the attribution, emotion and behaviour scales showed a Cronbach’s alpha ranging from .68 to .93 in Pilot 2, with most measures receiving results within a few decimal points of the Pilot 1 results. The emotion scales had not been previously tested, but the EFA and post-hoc EFA indicated that these showed convergent and discriminant validity.
CHAPTER 7 – STUDY 3

Chapter Outline

Study 3, being the main experimental piece of research, tested the full range of hypotheses in a factorial between-subjects design using a general population sample from the electoral roll. The main research objective was to test the impact of different Accounts in different Crisis types and different Harm levels on consumer emotions, behaviours and attitude. As a result, interaction and main effects of the Locus Crisis (internal, external), Controllability Crisis (controllable, uncontrollable), Accounts (no comment, denial, excuse, justification, confession) and different Harm levels (high, low) were tested against the hypothesized dependent variables. Following Study 2 results, the dependent variables were emotions, behavioural intents, attitude, involvement, responsibility, accountability, and attributions (locus, internal controllability, external controllability). A number of different variables also had been predicted to impact other variables, and these relationships were examined. Specifically, attributions, involvement, responsibility and accountability had been predicted to impact emotions. Attributions, responsibility, accountability, emotions and attitude had been predicted to impact behavioural intent. Finally, emotions had been predicted to impact attitude. In addition, education, income, gender and age had been predicted to impact emotions and behaviour and these variables were also examined.

The questionnaire in this study used scales that had been modified as a result of findings from the Study 2 Pilot Studies. Due to the failure of the previous attitude scale, a new scale by Milliman, Fugate and Afzalurrahim (1991) was selected and new items found for the behaviour scale, Word of Mouth. Details of these new scales are included in this section.

Research Design

The study used an experimental design in which several independent variables were manipulated to determine the effect on multiple dependent variables, with random assignment of participants to different levels of the of the manipulated variables (Hair et al., 1996; Pedahur & Schmelkin, 1991). Random assignment of participants and treatments allows the researcher to assume that groups are identical, except for the experimental treatment (Zikmund, 1997). The study tested the independent variables of Locus Crisis (internal, external), Controllability Crisis (controllable, uncontrollable) and Account (no comment, denial, excuse, justification, confession) and Harm levels (33 dead, 33 injured) on
hypothesised dependent variables. This yielded a 2 x 2 x 5 x 2 factorial design with 40 possible combinations of Crisis types, Account and Harm level, as listed in Table 34.

Table 34 The 2 x 2 x 5 x 2 Study 3 design

<table>
<thead>
<tr>
<th>Locus Crisis</th>
<th>Controllability Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal (I)</td>
<td>Controllable (C)</td>
</tr>
<tr>
<td>External (E)</td>
<td>Uncontrollable (U)</td>
</tr>
<tr>
<td></td>
<td>Controllable (C)</td>
</tr>
<tr>
<td></td>
<td>Uncontrollable (U)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Account</th>
<th>High (H)</th>
<th>Low (L)</th>
<th>High (H)</th>
<th>Low (L)</th>
<th>High (H)</th>
<th>Low (H)</th>
<th>High (L)</th>
<th>Low (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No comment (N)</td>
<td>ICHN</td>
<td>ICLN</td>
<td>IUHN</td>
<td>IULN</td>
<td>ECHN</td>
<td>ECLN</td>
<td>EUHN</td>
<td>EULN</td>
</tr>
<tr>
<td>Denial (D)</td>
<td>ICHD</td>
<td>ICLD</td>
<td>IUHD</td>
<td>IULD</td>
<td>ECHD</td>
<td>ECLD</td>
<td>EUHD</td>
<td>EULD</td>
</tr>
<tr>
<td>Excuse (E)</td>
<td>ICHE</td>
<td>ICLE</td>
<td>IUHE</td>
<td>IULE</td>
<td>ECHE</td>
<td>ECLE</td>
<td>EUHE</td>
<td>EULE</td>
</tr>
<tr>
<td>Justification (J)</td>
<td>ICHJ</td>
<td>ICLJ</td>
<td>IUHJ</td>
<td>IULJ</td>
<td>ECHJ</td>
<td>ECLJ</td>
<td>EUHJ</td>
<td>EULJ</td>
</tr>
<tr>
<td>Confession (C)</td>
<td>ICHC</td>
<td>ICLC</td>
<td>IUHC</td>
<td>IULC</td>
<td>ECHC</td>
<td>ECLC</td>
<td>EUHC</td>
<td>EULC</td>
</tr>
</tbody>
</table>

Measuring Instrument

The measuring instrument was in the form of a self-paced questionnaire. Crisis types, consisting of Locus Crisis (internal, external) and Controllability Crisis (controllable, uncontrollable), were operationalised in the form of a newspaper story about a plane crash, as in Study 2. These included a sub-heading at the base of the Crisis story listing the Account to minimize primacy effects. Accounts (no comment, denial, excuse, justification, confession) had been adjusted in Study 2 and repositioned in the questionnaire booklet to face the Crisis type vignette. The new independent variable from Study 2, Harm level, was operationalised via a major sub-heading and in the body copy in the Crisis type news stories (see Table 35).

Table 35 Operationalisation of Harm level

<table>
<thead>
<tr>
<th>Harm level</th>
<th>Major Sub-heading</th>
<th>Body copy included in Crisis type news story</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Last of 33 injured leaves Brisbane hospital</td>
<td>There were 33 passengers injured, none seriously, while 42 passengers were unharmed. The last passenger has been released from hospital.</td>
</tr>
<tr>
<td>High</td>
<td>Brisbane death toll climbs to 33</td>
<td>The crash death toll has climbed to 33 following the death of another passenger from injuries. There were 42 survivors.</td>
</tr>
</tbody>
</table>
In Study 2, manipulation checks had been previously established and tested for Crisis types and Harm (air crash severity), while for Account, there were manipulation checks for credibility, plus a 5-item and a 1-item check reflecting the content of the Account.

The scales consisted of questions covering the constructs of involvement, attributions of locus, internal controllability and external controllability, accountability, responsibility, emotions (anger, fear, sympathy, joy, surprise), behaviour (loyalty, complaining, withdrawal of custom, WOM) and attitude. These had been previously tested and adjusted in Study 2, although new WOM items were required, as well as a new attitude scale, as the previous attitude scale loaded with behavioural intentions in the EFA.

A review of potential attitude scales listed by Bruner II and Hensel (1998) and Bruner II, James, and Hensel (2001) measuring attitude towards the product or brand revealed that most common scale items were good-bad, favourable-unfavourable and pleasant-unpleasant. These items had been previously unsuccessful (see Appendix 7.1.1 for details on scale evaluations). Scales by Peterson, Wilson, and Brown (1992, in Bruner II & Hensel, 1998) and Milliman, Fugate, and Afzalurrahim (1991, in Bruner II & Hensel, 1998) measured items that were decidedly different to the previously used scale. The 6-item scale by Milliman, Fugate and Afzalurrahim (1991, in Bruner II & Hensel, 1998) was selected for use as it was applicable to company crisis scenarios. In addition, one item from Peterson, Wilson, and Brown’s (1992, in Bruner II & Hensel, 1998) scale was included, customer-orientation (see Appendix 7.1.2 for the final scale).

The word-of-mouth (WOM) behaviour scale originally consisted of negative and positive WOM items, as well as items for word-of-mouth activity, referring to the propensity to talk about the crisis. As previously used positive WOM items loaded with loyalty and negative WOM items loaded with withdrawal of custom in Pilots 1 and 2, these were deleted. While WOM activity was successful as a separate construct, this did not contribute to theory and was also deleted. As negative WOM is a well-recognised construct, considered separate from withdrawal of custom behaviour (previously called “switching”), it was decided to introduce a third round of items in the hope that these would prove separate to withdrawal of custom. These were adapted from scales earlier discussed in Chapters 5 and 6 (see Appendix 7.2 for scale details).

Demographic checks were also included, as before, for age, income, gender, education, culture, plus a postcode code to identify respondents’ home suburb.
Sampling

To maximize external validity and generalisability of results, the general population was the sampling frame. When conducting surveys to represent the general population, it is not possible to avoid significant sampling coverage error (Dillman, 2000). As noted in Chapter 6, because the crisis scenario was set in Brisbane, the preferred sampling frame was Brisbane residents aged 18 or over. As Griffith University’s Ethics policy did not allow use of a commercial list (e.g., frequent flyers, developed for various commercial uses), the list needed to be publicly available. List choice was therefore the White Pages residential phone book and electoral rolls.

The telephone directory was considered an unreliable general population source for several reasons: first, it excludes multiple residents in shared households; second, an estimated 11% of the population in major Queensland metropolitan areas have unlisted numbers (Cardona, Firman, Pollard, Casasola, Groos, Hutchings, McClintock, Dillon, & O’Brien, 1999); and third, an increasing number of the population have replaced fixed phone lines with mobile phones, many with unlisted numbers.

The final publicly available lists representing the general population were electoral rolls. These were considered a reliable general population source as people aged 18 or over are required by law to be registered to vote. There are three electoral registers in Australia reflecting the three levels of government: Federal, State and local. The Federal voting register is now only available for in-house searches and had not been recently updated. The local government electoral roll for Brisbane City Council, while publicly available, had not been updated since early 2000. However, the Queensland state electoral roll was publicly available, had been updated on May 30, 2003 (shortly before data collection) and all 39 electoral rolls for Brisbane were available for purchase. Using a recently updated roll would also help to minimise non-responses.

Random Sampling Design

A combination of simple random sampling and systematic sampling was used to locate participants. Random sampling was used as the basis for this study as this is most representative of the entire population and is least likely to result in bias (Alreck & Settle, 1995). Simple random sampling means that every member of the sample frame or list has an equal chance of being selected (Dillman, 2000). One common way to do this is to use a computer program that individually numbers each person and randomly selects the required
number of participants (Dillman, 2000). It is most appropriate when there is a good sampling frame and where data collection is by mail (de Vaus, 1995), as in Study 3.

Another method is systematic sampling. A systematic sample is obtained by dividing the population size by the required sample size and calculating a sampling fraction (de Vaus, 1995). It is used when a proportional spread of the population is required, as in this case, a proportional sample from each electoral district within Brisbane. This approach requires the population from which the participant sample is to be drawn to be sequentially numbered, as per simple random sampling (de Vaus, 1995).

I used systematic sampling to ensure a proportional spread of participants from all 39 electorates, then used random sampling to select participants within each electorate. The Queensland electoral roll listed 1,009,245 voters in the greater Brisbane area from a total population of 1,653,365 in 39 printed electoral district rolls for Brisbane. Each Brisbane electorate consisted of between 24,155 and 31,511 voters. Each voter had a number indicating their place on their particular electoral roll. For example, in Albert Shire, people were numbered from one to 28,478. (See Appendix 7.3 for Brisbane Electoral Districts.)

Using Tabachnik and Fidell’s (2001) argument that multivariate analysis is robust to most assumption violations if the sample is 20 or more per treatment condition, a minimum of 20 responses for each of the 40 treatment combinations was required – i.e., 800 returned questionnaires. Thus the initial mail-out of 3,000 questionnaires required an estimated usable return rate of 26.7%. While this was considered optimistic, it was trialled due to high postal costs ($3,000).

As a sample of 3,000 was needed, a sampling fraction was created for each electorate. This involved dividing the number of voters in each electorate by the total number of voters (1,009,245) to get a figure representing each electorate’s proportion of the voters. For example, the electorate of Albert Shire had 28,478 voters. This was divided by the total voting population of 1,009,245 and then multiplied by the 3000 in the desired sample to determine the number of voters selected from that electorate. So from Albert Shire, I selected 85 voters, as seen in the following equation:

\[
\frac{28,478}{1,009,245} \times 3000 = 85
\]

The Brisbane City Council’s web site figures (Estimated Resident Population) using preliminary data from the Australian Bureau of Statistics (Cat. No. 3218.0) listed the total population of the Brisbane Statistical Division, that is, the proclaimed Government Region, as 1,653,365.
I then used a random number generator, the Research Randomizer v.3 (2003) to select 85 numbers between 1 and 28,478 for the Albert electorate, each representing a voter who was posted the Study 3 questionnaire. (For an example, see Appendix 7.4 for the numbers randomly selected for the Albert electorate).

The Mail-Out Design And Response

Dillman (2000) advocated a number of techniques to increase response rates – personalised mail-outs, token financial incentives sent with the request to respond, and return envelopes with real stamps. As well, multiple contacts and follow-up contact can increase response rates by up to 20 to 40% (Dillman, 2000). Due to budgetary constraints, the incentive used here was the offer of entry into a prize draw comprising three gift vouchers from a major department store totalling $500, with response offered in pre-paid envelopes. The mail-out consisted of large plain white Griffith University envelopes containing the unfolded questionnaire, a cover sheet describing the study, a return pre-stamped envelope, and a combination prize draw and consent form with its own response envelope to ensure confidentiality. The questionnaire was printed on standard white A4 size paper, as recommended by Alreck and Settle (1985). As holiday periods like Christmas are best avoided (Dillman, 2000), the questionnaire mail-out occurred in early November, 2003. As more than 95% of all questionnaires that will be returned are usually received in the initial three or four weeks (Alreck & Settle, 1985), prizes were drawn four weeks after the mail-out. The response rate was 20%, with 591 usable questionnaires returned, resulting in some uneven numbers in treatment conditions. As a result, a second wave of mail-outs (1500) was conducted as before, but with non-replacement sampling to ensure that no questionnaire was sent to a previously sampled person. For treatment conditions that had fewer returns, more questionnaires proportionally were posted out. This mail-out had a response rate of 21%, yielding a further 316 usable questionnaires.

In summary, of the 4500 questionnaires posted, 907 usable responses were received – a response rate of 20.2%. Of the 166 (3.69 %) returned to sender, two were deceased, and the remainder had moved residence. A further 35 questionnaires were unusable due primarily to large amounts of missing data, or else a strong response bias (e.g., all ‘7s’). The response was within the 20% to 25% range typically produced by random samples generated through census data or other methods (Hunsaker, Cioffi, Amadio, Wright, & Caughlin, 2002).
Respondents

Of the 907 respondents, 39.5% were male, and ages ranged from 18 to 95 (mean at 45.7 years), with 97.9% identifying themselves as belonging to an individualist culture (e.g., Australian, English) and 2.1% as belonging to a collectivist culture (e.g., New Zealand Maori, Vietnamese, Chinese). A comparison with Brisbane residents, using Australian Bureau of Statistics 2001 census statistics (A Statistical Portrait of Brisbane, n.d.), showed that the proportion of respondents in particular age groups, and the culture mix, was similar to the local population, although there were proportionally more respondents in the 45 to 54 age group. In addition, Brisbane had a higher percentage of males than did this respondent sample (for full details comparing the respondent population with the Brisbane population, see Appendix 7.5). The level of completed education for respondents was slightly higher than that of the Brisbane population, while income was similar (see Appendix 7.5).

Despite the systematic selection process used to ensure even proportional sampling across all electorates, responses from some postcodes were over-represented. However, investigation indicated that the higher-response suburbs were scattered across Brisbane, generally suburbs located in the mid-range distance from the city - in the north, north-west, south-west, south and south-east suburbs, plus two north west commuter suburbs. A possible explanation considering the higher proportion of low-income earners (albeit, similar to the general population sample), higher female response rate, and higher respondent age is that many respondents may have been part-time workers with potentially more free time.

Cell sizes were approximately equal, with the 40 combinations of treatments ranging in size from 20 to 28. Problems occur when the ratio is more than 1:1.5 (Coakes & Steed, 2003), that is, if any cell had contained 30 or more participants (which did not occur). In this case, the ratio was 1:1.4 for some cells.

Graphical Examination Of The Data

Initial data cleanup was conducted, and frequencies checked.

Missing Data

The analysis of missing data showed that the amount missing for all questions, except income, ranged between 0.1% and 2.8% – substantially below the 5% mark considered
significant by Tabachnik and Fidell (2001). Testing showed that missing data appeared to be missing at random (details of amounts for each variable are in Appendix 7.6).

The income question had 5.7% missing data, however, income information is commonly excluded from demographic surveys. This required that group means for those with the missing income question were compared against the remainder of the sample using an independent-samples t-test. This used Levene’s test for equality of variances to test whether the variance or variation of scores for the two groups (respondents and non-respondents) were the same (Pallant, 2001). A number of tests were selected at random to compare the two groups: attribution of external controllability, accountability, emotions of anger and fear, behaviour of complaining, attitude. These results revealed no significant differences between groups.

Checking Univariate Assumptions Of Normality

For each variable in the ungrouped data, checks for outliers, and for univariate assumptions of normality (skewness and kurtosis), linearity and homoscedasticity were made, and the existence of outliers was checked on the ungrouped data before the analysis. Full results for each variable are in Appendix 7.6.

Boxplots showed very few outliers and extreme scores, as boxes were large and the “whiskers” often extended to the full range of upper and lower scores. A few outliers and extreme scores were found for the involvement items; for accountability, one item; for emotion, one outlier each was found for two joy items (enjoyment, glad) and one fear item (concerned); for behaviour, one outlier each was found for three loyalty items (one referred to doing business more often; one to recommending the business; one to encouraging others to use the business). An examination of differences between the means and the trimmed means to check for effects of outliers and extreme scores indicated that these made little difference to the outcome (see relevant appendices on assumptions of normality in Appendix 7.6). As Hair et al. (1998) argued for retaining outliers unless they were truly aberrant and not representative of any observations in the population, all outliers were retained.

Checks for skewness and kurtosis of individual items were made by examining descriptive information and histograms with the normal distribution overlaid. The Kolmogorov-Smirnov and the Shapiro-Wilks tests of normality showed a significant result (i.e., less than .05) of $p > .001$ for all 68 questionnaire items representing variables, indicating skewness and kurtosis for all results. However, this violation of the assumption of normality
is quite common in larger samples (Pallant, 2001). Many individual variables showed skewness in expected directions. Those strongly negatively skewed were involvement, accountability, internally controllable attributions, responsibility, and emotions of fear and anger. Those positively skewed were emotions of joy and sympathy, loyalty and complaining. Normal probability plots (Q-Q plots in SPSS) were examined, as well as skewness and kurtosis figures for items showing substantial deviation from the normal curve. Those variables were then examined to assess whether they fell within the normal range -2 to +2 for skewness and kurtosis, by using the ratio of skewness divided by its standard error, and the ratio of kurtosis divided by its standard error. In large samples, variables with statistically significant skewness often do not deviate enough from normality to make a substantive difference in the analysis (Tabachnik & Fidell, 2001). In addition, no transformations were carried out for the same reasons as for Study 2: Tabachnik and Fidell (2001) argued that transformations were not universally recommended and may change variable interpretation.

The assumption of linearity was assessed for the hypothesised relationships between variables. As there were numerous variables, screening all possible pairs was not possible, therefore skewed pairs likely to depart from linearity were assessed, as recommended by Tabachnik and Fidell (2001). Many bivariate scatterplots were examined for signs of homoscedasticity. Scatterplots showed substantial heteroscedasticity with non-linear and bulging distributions of data. However, heteroscedasticity is common in ungrouped data and is not a severe problem in its analysis (Tabachnik & Fidell, 2001).

Questionnaire Factor Analysis – Exploratory and Confirmatory

In Study 2, the exploratory factor analysis (EFA) was conducted predominantly for data reduction, as well as to ensure that coherent sub-groups of variables were related to each other, but relatively independent of similarly grouped variables.

In Study 3, both an EFA and a confirmatory factor analysis (CFA) were conducted for all variables. The EFA was conducted for several reasons: to ascertain whether scale items still grouped on factors, despite a different population sample; because the item pool had substantially changed due to data reduction of scales and from new scale additions; and because, as there were new negative word-of-mouth and attitude scales, it was necessary to investigate whether singularity occurred, i.e., whether there were redundant variables that comprised a combination of two or more other variables (Tabachnik & Fidell, 2001).
The CFA was conducted to check construct validity, and to determine weightings for each questionnaire item in the additive scales. To carry out the analysis, the sample of 907 was split in two, with one half used for the EFA and the other for the CFA, as recommended by Byrne (2001). As the study used 40 different treatment combinations, all predicted to elicit different results, the sample was split so that each contained half of the respondents from each of the 40 treatments. The CFA results were then tested on the full sample for cross validation.

**Exploratory Factor Analysis (EFA)**

The sample size for the EFA was 452, congruent with Tabachnik and Fidell’s (2001) recommendation of a minimum of 300 cases for factor analysis. Using SPSS, the same method of analysis applied in Study 2 was used in Study 3, that is, common factor analysis (FA) using Principal Axis Factoring (PAF) with oblique rotation as there were correlated items.

As departures from normality, homoscedasticity and linearity diminish observed correlations (Hair et al., 1998), as noted earlier, assumptions of normality (skewness and kurtosis) and linearity were checked on the non-summated data prior to the analysis, with outliers and degree of missing data checked (see details for each construct in Appendices 7.3.1 to 7.3.7).

The questionnaire contained 68 separate items for involvement, attributions of locus, internal controllability and external controllability, accountability, responsibility, emotions, behaviours and attitude. All items were entered in the FA. With a sample size of 452, the case to variable ratio was 6.6:1. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .943, well above the recommended value of .6 (Tabachnik & Fidell, 2001) and Bartlett’s test of sphericity was significant ($p \leq .001$). Visual inspection of the correlation matrix showed substantial numbers of correlations greater than .30, further indicating that a factor analysis was justified (Hair et al., 1998). In addition, no correlations approached 1, indicating no singularity or extreme multicollinearity (Hair et al., 1998). A few correlations were above .8, with a number above .7 for same-scale items. This was desirable, as evidence of convergent validity is obtained if two measures of the same construct correlate strongly (Yavus & Babakus, 1995). Additionally, as indicated by Tabachnik and Fidell (2001), items with a bivariate correlation of .7 or above may be retained where a structure analysis is being carried out, as in an EFA and CFA.

Several items (one externally controllable attribution item, which referred to an external person being able to prevent the crisis, the anger emotion of “frustrated”, the joy
emotions felt toward the company of “relieved” and “contented”, and the responsibility item that referred to the extent to which the crash was avoidable) had extracted communalities substantially below the .4 level at which a variable is normally retained, and were removed from the analysis.

Eleven factors had eigenvalues over 1, which together explained 69.41% of the variance, while the scree plot and the factor matrix indicated that anything from a 9-factor to a 12-factor solution was possible. As establishing a factor cut-off using the eigenvalue is most reliable when the number of variables is between 20 and 50 (Hair et al., 1998), because there were 68 items, other solutions were examined, with the aim of theoretical coherence. As the scree plot showed a gradual curve straightening out around the 10\textsuperscript{th} factor, each of the 9-, 10-, 11- and 12-factor solutions were examined. There was a number of complex items. An oblique rotation was chosen (as in Study 2) because some factors were correlated. For results see Table 36. The 9-factor and 10-factor solutions showed some theoretically divergent constructs grouping and a number of complex items, such as anger, loading with complaining and attributions. The 11-factor solution mimicked the 10-factor solution, except that Factor 9 contained joy only, with loyalty moving into Factor 11; The 12-factor solution provided the most satisfactory as it had the fewest groupings of theoretically divergent constructs and the fewest complex items (see Appendix 7.7.1 for pattern matrix of 12-factor solution).
<table>
<thead>
<tr>
<th>Factor</th>
<th>9-factor solution</th>
<th>10-factor</th>
<th>11-factor</th>
<th>12-factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fear</td>
<td>Negative WOM</td>
<td>Negative WOM</td>
<td>Negative WOM</td>
</tr>
<tr>
<td></td>
<td>Negative WOM – 1 item</td>
<td>Withdrawal of</td>
<td>Withdrawal of</td>
<td>Withdrawal of</td>
</tr>
<tr>
<td></td>
<td>WOC – 1 item</td>
<td>Custom</td>
<td>Custom</td>
<td>Custom</td>
</tr>
<tr>
<td>2</td>
<td>Attitude</td>
<td>Attitude</td>
<td>Attitude</td>
<td>Attitude</td>
</tr>
<tr>
<td>3</td>
<td>Attributions:</td>
<td>Attributions:</td>
<td>Attributions:</td>
<td>Attributions:</td>
</tr>
<tr>
<td></td>
<td>- internal</td>
<td>- internal</td>
<td>- internal</td>
<td>- external</td>
</tr>
<tr>
<td></td>
<td>controllability</td>
<td>controllability</td>
<td>controllability</td>
<td>controllability</td>
</tr>
<tr>
<td></td>
<td>- accountability</td>
<td>accountability</td>
<td>accountability</td>
<td>- locus</td>
</tr>
<tr>
<td></td>
<td>- responsibility</td>
<td>- responsibility</td>
<td>- responsibility</td>
<td>- locus</td>
</tr>
<tr>
<td></td>
<td>- locus</td>
<td>and</td>
<td>and</td>
<td>and</td>
</tr>
<tr>
<td></td>
<td>Anger – 1 item</td>
<td>Complex items:</td>
<td>Complex items:</td>
<td>Complex items:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 1 locus and 2 loyalty</td>
<td>- 1 locus and 2 loyalty</td>
<td>- 1 locus and 2 loyalty</td>
</tr>
<tr>
<td>4</td>
<td>Involvement</td>
<td>Involvement</td>
<td>Involvement</td>
<td>Involvement</td>
</tr>
<tr>
<td>5</td>
<td>Surprise</td>
<td>Complaining</td>
<td>Complaining</td>
<td>Complaining</td>
</tr>
<tr>
<td></td>
<td>Anger</td>
<td>Anger</td>
<td>Anger</td>
<td>Anger</td>
</tr>
<tr>
<td></td>
<td>Complex items:</td>
<td>Complex items:</td>
<td>Complex items:</td>
<td>Complex items:</td>
</tr>
<tr>
<td></td>
<td>- 2 anger</td>
<td>- 2 anger</td>
<td>- 2 anger</td>
<td>- 2 anger</td>
</tr>
<tr>
<td>6</td>
<td>Complaining</td>
<td>Surprise</td>
<td>Surprise</td>
<td>Fear</td>
</tr>
<tr>
<td></td>
<td>Negative WOM</td>
<td>Anger</td>
<td>Anger</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WOC</td>
<td>Complex items:</td>
<td>Complex items:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 3 anger</td>
<td>- 3 anger</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complex items:</td>
<td>- 3 anger</td>
<td>- 3 anger</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Anger</td>
<td>- 3 anger</td>
<td>- 3 anger</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sympathy</td>
<td>Attributions:</td>
<td>Attributions:</td>
<td>Sympathy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- externally</td>
<td>- externally</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>controllable</td>
<td>controllable</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- locus</td>
<td>- locus</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complex items</td>
<td>Complex items</td>
<td>Complex items</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 2 locus</td>
<td>- 2 locus</td>
<td>- 2 locus</td>
</tr>
<tr>
<td>8</td>
<td>Attributions:</td>
<td>Sympathy</td>
<td>Sympathy</td>
<td>Joy</td>
</tr>
<tr>
<td></td>
<td>- Locus as complex items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Joy</td>
<td>Joy</td>
<td>Joy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loyalty</td>
<td>Loyalty</td>
<td>Loyalty</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Fear</td>
<td>Fear</td>
<td>Anger</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Loyalty</td>
<td>Loyalty</td>
<td>Loyalty</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td>Surprise</td>
</tr>
</tbody>
</table>
The 12-factor solution resulted in two groupings consistent with Study 2: negative word-of-mouth (WOM) items loaded with withdrawal of custom, despite replacement with new items after Study 2 to try to avoid this problem; and attribution items grouped together as before. Using a post-hoc factor analysis to test whether a general factor emerged (recommended by Podsakoff and Organ, 1986), these items were further tested. One general factor emerged for the negative WOM items and withdrawal of custom items (as in Study 2), as indicated by the scree plot and factor matrix, with Factor 1 accounting for 74.57% of the variance (see Appendix 7.7.2 for factor loadings).

The attribution items grouped as expected from Study 2: internal controllability loaded on the same factor with responsibility and accountability, with two locus (internal/external) items as complex items; In addition, external controllability items loaded with locus items (internal/external). However, this grouping made theoretical sense. A further EFA on all the attribution items showed a 2-factor solution identical to that just described. This indicated the need for a confirmatory factor analysis (CFA) examining all constructs that grouped to examine discriminant and convergent validity of these measures.

There EFA produced one different result from Study 2: while attitude previously clustered with behaviour, in Study 3, the new attitude scale successfully distinguished between these constructs. Table 37 explains further action taken in testing the constructs.
### Table 37 Further analyses conducted

<table>
<thead>
<tr>
<th>Construct</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Involvement: All four items</td>
<td>CFA</td>
</tr>
<tr>
<td></td>
<td>Factor score weights</td>
</tr>
<tr>
<td></td>
<td>Scale reliability analysis</td>
</tr>
<tr>
<td>2. Attributions:</td>
<td>CFA to establish separation of constructs</td>
</tr>
<tr>
<td>- Externally controllable attributions</td>
<td>Factor score weights</td>
</tr>
<tr>
<td>- (one item removed in EFA): 2-item</td>
<td>Scale reliability analysis</td>
</tr>
<tr>
<td>- scale tested in conjunction with</td>
<td></td>
</tr>
<tr>
<td>- other attribution constructs</td>
<td></td>
</tr>
<tr>
<td>- Internally controllable attributions</td>
<td></td>
</tr>
<tr>
<td>- (3 items)</td>
<td></td>
</tr>
<tr>
<td>- Locus attributions (3 items)</td>
<td></td>
</tr>
<tr>
<td>3. Responsibility:</td>
<td>CFA to establish separation of constructs</td>
</tr>
<tr>
<td>- 2-item scale (one responsibility</td>
<td>Scale reliability analysis</td>
</tr>
<tr>
<td>- item removed during EFA), tested</td>
<td></td>
</tr>
<tr>
<td>- with the attributional items it</td>
<td></td>
</tr>
<tr>
<td>- clustered with in the EFA:</td>
<td></td>
</tr>
<tr>
<td>- internally controllable and locus</td>
<td></td>
</tr>
<tr>
<td>- attributions.</td>
<td></td>
</tr>
<tr>
<td>4. Emotion:</td>
<td>CFA on each scale</td>
</tr>
<tr>
<td>- Six anger items: “angry”, “contempt”,</td>
<td>Factor score weights</td>
</tr>
<tr>
<td>- “disgusted”, “annoyed”, “dislike”,”</td>
<td>Scale reliability analysis</td>
</tr>
<tr>
<td>- outraged” (but not “frustrated”</td>
<td></td>
</tr>
<tr>
<td>- which had been removed in the EFA).</td>
<td></td>
</tr>
<tr>
<td>- All five surprise items: “amazed”,”</td>
<td></td>
</tr>
<tr>
<td>- “surprised”, “astounded”, “shocked”</td>
<td></td>
</tr>
<tr>
<td>- “astonished”</td>
<td></td>
</tr>
<tr>
<td>- All seven fear items: “concerned”,”</td>
<td></td>
</tr>
<tr>
<td>- “worried”, “apprehensive”, “uneasy”</td>
<td></td>
</tr>
<tr>
<td>- “scared”, “distressed”, “fearful”</td>
<td></td>
</tr>
<tr>
<td>- All four sympathy items: “sympathetic”,</td>
<td></td>
</tr>
<tr>
<td>- “sorry”, “compassion”, “empathy”</td>
<td></td>
</tr>
<tr>
<td>- Four joy items: to service use - “glad”,</td>
<td></td>
</tr>
<tr>
<td>- “enjoyment”, “contented” and to</td>
<td></td>
</tr>
<tr>
<td>- company - “satisfied” (but not “relieved”</td>
<td></td>
</tr>
<tr>
<td>- or “contented”, which had been</td>
<td></td>
</tr>
<tr>
<td>- removed in the EFA).</td>
<td></td>
</tr>
<tr>
<td>5. Behaviour:</td>
<td>CFA on each scale</td>
</tr>
<tr>
<td>- All four loyalty items</td>
<td>Factor score weights</td>
</tr>
<tr>
<td>- All four complaining items</td>
<td>Scale reliability analysis</td>
</tr>
<tr>
<td>- All four withdrawal of custom items,</td>
<td></td>
</tr>
<tr>
<td>- combined with all three negative</td>
<td></td>
</tr>
<tr>
<td>- word-of-mouth items.</td>
<td></td>
</tr>
<tr>
<td>6. Attitude: All seven items</td>
<td>CFA</td>
</tr>
<tr>
<td></td>
<td>Factor score weights</td>
</tr>
<tr>
<td></td>
<td>Scale reliability analysis</td>
</tr>
</tbody>
</table>
Confirmatory Factor Analysis (CFA)

Using the remaining half-sample, a CFA using the AMOS program was next conducted, (i) to determine whether any items in a scale should receive a higher or lower weighting as it contributed more, or less, to the construct, and (ii) to determine the content validity of each of the scales by testing model goodness-of-fit. Most scales had between four and seven items and for these, a 1-factor congeneric measurement model was first tested representing the regression of the set of observed variables, the scale items, on the single latent variable, the construct (Byrne, 2001). Parameters were estimated using maximum likelihood technique. Loadings of one item per latent construct were constrained to unity to permit scaling. As a model could not be calculated with missing data, and as the univariate analysis indicated that the constructs contained only between 0.1% to 2.8% of missing data, after separating out each construct, I used listwise deletion to remove items with missing data. This is the most common method of dealing with missing data (Byrne, 2001). The full data set was retained for further analyses.

The remaining attributional scales (locus, internal controllability, external controllability) and the reduced 2-item responsibility scale (but not the 1-item accountability scale) were jointly tested. For these items a parameter constraint of one for each path from the item to the construct was used.

The purpose of the CFA was to obtain factor score weightings for each item in the scale as well as scale examination, particularly as some scales were newly developed (e.g. emotions) or revised. Bagozzi and Baumgartner (1994) noted that there are practical limits as to how many items can be explicitly related to a factor, predicting disappointing results much beyond five. This occurred with the larger scales. Items were not deleted simply to obtain better fit statistics, but to achieve a more parsimonious scale. For larger scales, four items was the minimum retained as fit indices could not be estimated on a 3-item scale. Using the process described by Byrne (2001), after a suitable CFA structure was finalised, factor score weightings were then calculated on the entire original sample. The reliability for each scale was then determined, applying the weightings to the entire original sample. The CFA process used is summarised in Table 38.
Table 38 Stages in the CFA process

<table>
<thead>
<tr>
<th>Stage</th>
<th>Confirmatory Factor Analysis process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Using CFA sample, I initially copied data, then placed it into separate files for each construct.</td>
</tr>
<tr>
<td>2.</td>
<td>As a model could not be calculated with missing data, due to the small amount of missing data for each construct, I used listwise deletion.</td>
</tr>
<tr>
<td>3.</td>
<td>I tested and revised each model until fit statistics were reasonable. The few items with values &gt; ±2.58 in the standardised residual covariance matrix were removed (Jöreskog &amp; Sörbom, 1988 in Byrne, 2001). This was because large residuals indicate substantial error. One option used to improve fit indices and internal reliability was to remove items where error terms were correlated because, as Byrne (2001) noted, multiple correlated error terms indicate redundancy.</td>
</tr>
<tr>
<td>4.</td>
<td>Scale reliability was tested using Cronbach’s alpha on the entire original sample.</td>
</tr>
<tr>
<td>5.</td>
<td>Before this could be done, using the entire original sample, I copied and isolated items in each construct.</td>
</tr>
<tr>
<td>6.</td>
<td>I deleted items that contained missing data for each construct.</td>
</tr>
<tr>
<td>7.</td>
<td>Using finalised CFA structure for that construct, I determined factor loadings for each item.</td>
</tr>
<tr>
<td>8.</td>
<td>Using the whole sample, I tested each construct for scale reliability using the factor score weightings.</td>
</tr>
</tbody>
</table>

All scales with four or more items were tested as congeneric models. For scales with more than four items, when fit indices were not within acceptable ranges, items were deleted if the fit was thereby improved. For scales with items of four items or less, when fit indices were not within acceptable ranges, error terms were only correlated where reliability testing indicated that the items needed to be retained. Using the entire sample, weightings were determined for all items in the scales, then internal reliability was estimated. Full details of all CFA procedures for each construct and the factor loadings are given in Appendix 7.8.

**Involvement.**

This 4-item scale was tested as a congeneric model. Chi-square difference tests suggested that the model provided a poor fit, $\chi^2(2, N = 442) = 10.869, p < .001$, while other fit statistics were not within acceptable ranges. Error terms e1 and e2, for items which both referred to degree of degree of importance (is important to me/matters to me), were correlated to improve the fit. The second model with correlated error terms provided a better fit, $\chi^2(1, N = 436) = 1.46, p > .05$ (CFI = 1, RMR = .007, GFI = .998, AGFI = .994, RMSEA =
0.032, NFI = .999). See Appendix 7.8.1 for the model. The factor loadings for the scale were estimated using the entire sample – see Appendix 7.8.2 for factor score weights. This scale had a Cronbach’s alpha of .91, with all items retained.

Attributions and responsibility.

Attributions consisted of internal controllability, external controllability and locus, which were correlated with other attribution-like items of accountability and responsibility. Thus, in the EFA, it was not surprising that attributions of internal controllability, accountability and responsibility loaded on one factor with locus items as complex items, while externally controllable attributions loaded on another factor with locus items. As a result, all these scales were initially jointly tested. Scales were 3-item, with the exception of external controllability and responsibility, both of which had been reduced after EFA to two items, and accountability, a 1-item scale. However, adding the 1-item accountability scale to the joint test for all attribution and attribution-like scales created an unidentified model, thus accountability was not tested (see Appendix 7.8.3).

This model showed reasonable fit statistics, despite a significant chi-square, \( \chi^2(29, N = 427) = 1.83, p < .05 \) (CFI = .99, RMR = .096, GFI = .974, AGFI = .952, RMSEA = .045, NFI = .975). Loadings for all items on their designated factor were significant (\( p < .001 \)) (see Appendix 7.8.4). As expected, there was a low negative correlation (\( r = -.29 \)) between external controllability and responsibility (see Appendix 7.8.4). The scales showed reasonable discriminant validity, with internal controllability being negatively correlated (\( r = -.34 \)) with external controllability and locus (internal/external) being correlated with external controllability (\( r = .56 \)) and internal controllability (\( r = -.66 \)).

However, there was a high correlation between internal controllability and responsibility (\( r = .86 \)). While this suggested a lack of discriminant validity between these two constructs, a high correlation was expected as it had been predicted that the higher the perceived internal controllability, the higher the perceived responsibility. However, Yavus and Babakus (1995) suggested a way to test discriminant validity in this instance: if the single-factor model, where the two sets of measures are forced to load on one factor, provided a significantly larger chi-square than did the 2-factor formulation, the results were then considered evidence of discriminant validity (Yavus & Babakus, 1995). This was tested and provided support for the discriminant validity of the 2-factor model (see Appendices 7.8.4 and 7.8.5).
The factor loadings for the scale were estimated using the entire sample (see Appendix 7.8.6). For the locus attribution scale, all paths between items and the construct were high. The scale had a Cronbach’s alpha of .80.

For the internally controllable attribution scale, all paths between items were reasonably high. The factor loadings for the scale were estimated using the entire sample (see Appendix 7.8.7). The scale had a Cronbach’s alpha of .83.

For the externally controllable attribution scale, the remaining paths were reasonably high. The factor loadings for the scale were estimated using the entire sample (see Appendix 7.8.8). As it was not possible to conduct reliability estimations on 2-item scales, reliability was examined on the 3-item scale, indicating that Cronbach’s alpha was .68 with the removal of the third item.

For the 2-item responsibility scale, all paths to the construct were reasonably high. The factor loadings for the scale were estimated using the entire sample (see Appendix 7.8.9). The reliability estimation for this 2-item scale was conducted on the 3-item scale, showing that Cronbach’s alpha was .78 with the removal of the third item.

**Emotions.**

As each of the five emotion scales had four or more items, these were tested as congeneric models.

**Anger**

The 6-item anger scale (“frustrated” had been removed in the EFA) showed poor initial fit estimates for the model, and indicated that multiple error terms should be correlated (details in Appendix 7.8.10). To create a more parsimonious scale, I deleted one item from each pair with correlated error terms that had the lowest factor loadings, leaving a 4-item scale consisting of “angry”, “disgusted”, “annoyed”, and “outraged”. This had good fit indices: $\chi^2(2, N = 443) = .204, p < .01$, and excellent fit statistics ($\text{CFI} = 1, \text{GFI} = 1, \text{AGFI} = .998, \text{RMSEA} = .000, \text{RMR} = .013, \text{NFI} = 1$) (see Appendix 7.8.11, and for factor weights, see Appendix 7.8.12). Cronbach’s alpha was .89.

**Fear**

The 7-item fear scale was tested as a congeneric model and showed a very poor fit. The modification indices revealed multiple correlations between error terms, indicating redundant items (see Appendix 7.8.13). Removal of “concerned”, “worried” and “uneasy” resulted in
the most improved fit indices, with no correlated error terms and a 4-item scale, consisting of “apprehensive”, “scared”, “distressed” and “fearful” with good fit indices: $\chi^2(2, N = 449) = 1.65, p > .05$ (CFI = .999, GFI = .996, AGFI = .982, RMSEA = .038, RMR = .023, NFI = .998) (See Appendix 7.8.14 for the final model and Appendix 7.8.15 for the factor loadings). The scale had a Cronbach’s alpha of .93.

Joy

As two joy items (emotions felt towards the company of “relieved” and “contented”) had been removed during the EFA, this left a 4-item scale consisting of “satisfied”, “enjoyment”, “contented” and “glad” with a poor model fit. Two error terms were correlated, resulting in a good fit, $\chi^2(1, N = 449) = .70, p > .01$ (CFI = 1.00, GFI = .999, AGFI = .992, RMSEA = .000, RMR = .013, NFI = .999). See Appendix 7.8.16 for details. As the fit indices could not be estimated on a 3-item scale, this 4-item scale was accepted – see Appendix 7.8.17 for factor loadings. The 4-item scale had a Cronbach’s alpha of .83.

Surprise

The 5-item surprise scale had a poor fit. Other fit statistics were not within acceptable ranges. “Surprise” was deleted as the modification indices indicated a number of correlations between “surprised” and other items, and it had the lowest factor score weight. This resulted in improved fit indices (see Appendix 7.8.18 for details). However, two error terms were correlated. Re-running the analysis resulted in a perfect fit with a just identified model, $\chi^2(1, N = 449) = .000, p > .05$ (CFI = 1.00, RMR = .000, GFI = 1, AGFI = 1.00, TLI = 1.00, RMSEA = .000, NFI = 1). While this may seem overfitted, the option was either a model with poor fit indices, or else a 3-item scale in which the fit indices could not be estimated. It was decided to accept this 4-item scale. The factor loadings for the scale are in Appendix 7.8.19. The scale had a Cronbach’s alpha of .86.

Sympathy

The 4-item sympathy scale showed reasonable model fit estimates. The chi-square value was non-significant, $\chi^2(2, N = 449) = 2.797, p > .05$ with acceptable fit statistics (CFI = .995, GFI = .994, AGFI = .968), although RMSEA and RMR were non-significant (RMSEA = .064, RMR = .062, NFI = .992). It was decided not to seek to improve this analysis further (see results in Appendix 7.8.20 and factor score weights in Appendix 7.8.21). The scale reliability showed a Cronbach’s alpha of .85.
**Behaviour.**

Loyalty

This 4-item scale showed poor fit estimates. The chi-square value was significant, $\chi^2(2, N = 449) = 8.332, p < .01$ and some fit statistics were within acceptable ranges (CFI = .982, GFI = .983, RMR = .054, NFI = .979) although others were not (AGFI = .914, RMSEA = .128). While correlating two error terms would have marginally improve the fit, it was decided not to improve this analysis further (see Appendix 7.8.22 for details). Factor score weights are in Appendix 7.8.23. The scale Cronbach’s alpha was .85.

Negative word of mouth and withdrawal of custom

As negative word of mouth items (-WOM) loaded with withdrawal of custom (WOC) items on the EFA, and a further EFA showed that these loaded on one factor, the two scales were jointly evaluated in CFA. The estimated correlation between -WOM and WOC was .998 (see Appendix 7.8.24), indicating that these scales should be amalgamated. Using Yavus and Babakus’ (1995) suggested test, the scales were also tested for discriminant validity, but this was not evident (see Appendix 7.8.24 for details).

The 7-item scale, now referred to as “disloyalty” had a poor fit with multiple correlated error terms (see details and model in Appendix 7.8.25). Removing items with the lowest factor loadings left three -WOM items and one WOC item on a scale with excellent fit indices: $\chi^2(2, N = 442) = .003, p > .05$ (CFI = 1, GFI = 1, AGFI = 1, RMSEA = .000, RMR = .001, NFI = 1). (See Appendix 7.8.26 for the final model and Appendix 7.8.27 for the factor loadings). The scale had a Cronbach’s alpha of .94.

Complaining

This 4-item scale showed poor initial fit estimates. The chi-square value was significant, $\chi^2(2, N = 445) = 5.037, p < .05$, although some fit statistics were within acceptable ranges (CFI = .992, GFI = .989, AGFI = .947, RMR = .055, NFI = .990), although RMSEA was poor (RMSEA = .095). All paths were significant ($p < .001$) and the standardized residual covariances indicated no problem. As the modification indices indicated that correlating error terms would result in negative parameter changes, none were correlated. As fit indices could not be estimated on a 3-item scale, it was decided to accept this model (see Appendix 7.8.28). Factor score weights are in Appendix 7.8.29. Cronbach’s alpha was .89.
Attitude.

The initial CFA on the 7-item scale, tested as a congeneric model, indicated poor fit and a substantial number of correlated error terms. While correlating these terms yielded reasonable fit indices, this indicated redundant items and a still significant chi-square value (for details, see Appendix 7.8.30). As a result, these items were deleted, starting with those with the lowest factor loadings, until results were satisfactory. The resulting 4-item scale (“professional ability”, “overall general impression”, “trustworthiness”, “likeability”) had good fit indices, $\chi^2(2, N = 442) = 1.972, p > .05$ (CFI = .999, GFI = .996, AGFI = .978, RMSEA = .047, RMR = .018, NFI = .998) as seen in Appendix 7.8.31. Factor score weights are in Appendix 7.8.32. Cronbach’s alpha was .93.

Summated data resulting from factor analyses.

As a result of the EFA and CFA, the scales were adjusted and factor scores estimated for each item in the various scales. Factor scores represent the degree to which each individual scored on the group of items that had high loadings on a factor (Hair et al., 1998). Therefore, higher values on the variables that had high loadings on a factor resulted in a higher factor score (Hair et al., 1998). Each scale was summated using the factor loadings and Cronbach alphas calculated using the entire population sample.

Checking Multivariate Assumptions

As there were four independent variables and 15 dependent variables, hypotheses were tested in a factorial design using MANOVAs, ANOVAs, and regression analysis. But as multivariate tests have a number of general assumptions underlying their use, plus additional technique-specific assumptions, these general assumptions were discussed.

Sample Size and Group Size

Cell sizes were approximately equal, with sample size ranging from 20 to 28. Problems only occur when the ratio of dependent variables to subjects in each cell is more than 1:1.5 (Coakes & Steed, 2003), while the maximum ratio here was 1:1.4.

Multivariate Normality

Statistical analysis was carried out under the assumption that all variables were multivariate normal. However, as there was no direct test for multivariate normality, most researchers test for univariate normality of each variable (Hair et al., 1998). Tests for
univariate normality had already been carried out, as reported in the preceding section on univariate assumptions.

**Outliers**

As both multiple regression and MANOVA are sensitive to multivariate outliers, (Pallant, 2001), Mahalanobis distance was used to identify multivariate outliers. Using the alpha level of .001 indicated by Coakes and Steed (2003), the critical value of χ² for the 15 variables was 37.697. As the value of the maximum Mahalanobis distance was 73.250, this indicated that multivariate outliers were present. Twenty-four participants had values above the critical value, three slightly over. Five of these showed as outliers on the involvement boxplots. For the remainder, their combination of scores may have resulted in their identification as outliers. As a preliminary MANOVA indicated that these outliers impacted results, the 21 most severe cases were removed from further analysis.

**Linearity**

Multivariate testing assumes linear relationships among all pairs of interval-measured DVs. Deviations from linearity reduce the power of the statistical tests, first because the linear combinations of DVs do not maximise the separation of the groups for the IVs, second, because covariates do not maximise adjustment for error (Tabachnik & Fidell, 2001). Within-cell scatterplots were conducted to check for the presence of non-linear relationships among the DVs (as recommended by Coakes & Steed, 2003). No curvilinear relationships were identified. There was some bivariate heteroscedasticity among the summated DVs, but not amongst DVs hypothesised as related. However, as noted earlier, the analysis was robust to most assumption violations when the sample size is 20 or more per cell, which was the case.

**Multicollinearity and Singularity**

As it was predicted that many constructs predicted others, correlations were expected. Multicollinearity is a concern if correlations among DVs are .70 or above (Tabachnik & Fidell, 2001), while it is generally accepted that singularity occurs with variables correlated above .90. In Study 3, as can be seen in Table 39, three conceptually different variables were correlated above .70. These were the attribution of internal controllability, responsibility and accountability, all of which grouped on the same factor in the EFA. Internal controllability was correlated with responsibility ($r = .73$), and with accountability ($r = .75$), while accountability and responsibility were correlated ($r = .78$), with all correlations significant at $p < .01$. The argument for internal controllability and responsibility being related, but separate constructs, had been addressed and demonstrated in the CFA analyses, while that for responsibility and accountability was addressed in Chapter 2.
Table 39: Correlation Matrix for the Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Involvement</td>
<td>_</td>
<td>-.147**</td>
<td>.182**</td>
<td>-.022</td>
<td>.228**</td>
<td>.256**</td>
<td>.253**</td>
<td>.336**</td>
<td>.198**</td>
<td>-.250**</td>
<td>-.041</td>
<td>.187**</td>
<td>-.240**</td>
<td>.284**</td>
<td>-.120**</td>
</tr>
<tr>
<td>2. Locus-int.ext</td>
<td>_</td>
<td>-.583**</td>
<td>.489**</td>
<td>-.600**</td>
<td>-.609**</td>
<td>-.400**</td>
<td>-.266**</td>
<td>-.191**</td>
<td>.251**</td>
<td>.281**</td>
<td>-.130**</td>
<td>-.297**</td>
<td>-.320**</td>
<td>.315**</td>
<td></td>
</tr>
<tr>
<td>3. Internal cont.</td>
<td>_</td>
<td>-.302**</td>
<td>.747**</td>
<td>.735**</td>
<td>.519**</td>
<td>.319**</td>
<td>.220**</td>
<td>-.326**</td>
<td>-.368**</td>
<td>.254**</td>
<td>-.359**</td>
<td>.423**</td>
<td>-.389**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. External cont</td>
<td>_</td>
<td>-.283**</td>
<td>-.290**</td>
<td>-.142**</td>
<td>-.085**</td>
<td>-.091**</td>
<td>.135**</td>
<td>.178**</td>
<td>.039</td>
<td>.126**</td>
<td>-.101**</td>
<td>-.134**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Accountability</td>
<td>_</td>
<td>.782**</td>
<td>.558**</td>
<td>.399**</td>
<td>.236**</td>
<td>-.375**</td>
<td>-.365**</td>
<td>.273**</td>
<td>-.406**</td>
<td>.438**</td>
<td>-.424**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Responsibility</td>
<td>_</td>
<td>.614**</td>
<td>.430**</td>
<td>.266**</td>
<td>-.364**</td>
<td>-.366**</td>
<td>.340**</td>
<td>-.404**</td>
<td>.483**</td>
<td>-.423**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Anger</td>
<td>_</td>
<td>.613**</td>
<td>.543**</td>
<td>.438**</td>
<td>-.409**</td>
<td>.541**</td>
<td>-.423**</td>
<td>.660**</td>
<td>-.506**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Fear</td>
<td>_</td>
<td>.356**</td>
<td>-.498**</td>
<td>-.303**</td>
<td>.401**</td>
<td>-.498**</td>
<td>.677**</td>
<td>-.434**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Surprise</td>
<td>_</td>
<td>-.169**</td>
<td>-.100**</td>
<td>.276**</td>
<td>-.155**</td>
<td>.315**</td>
<td>-.172**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Joy</td>
<td>_</td>
<td>.496**</td>
<td>-.228**</td>
<td>.648**</td>
<td>-.524**</td>
<td>.575**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Sympathy</td>
<td>_</td>
<td>-.184**</td>
<td>.439**</td>
<td>-.388**</td>
<td>.544**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Complain</td>
<td>_</td>
<td>-.225**</td>
<td>.566**</td>
<td>-.301**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Loyalty</td>
<td>_</td>
<td>-.552**</td>
<td>.642**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Disloyalty</td>
<td>_</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Attitude</td>
<td>_</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < 0.01 level (2-tailed); * p < .05 level (2-tailed).
**Homogeneity of Variance-covariance Matrices**

In the MANOVA analysis, Levene’s test for equality of variances determined whether the variability in each of the groups was similar. Ideally, results should be non-significant, i.e., $p > .05$. While this wasn’t always the case in this study (details are provided in relevant sections), MANOVA is reasonably robust to violations of this assumption, provided that group sizes are similar (Pallant, 2001), which, in this case, they were.

Homogeneity of covariance matrices was tested in the MANOVA analysis using Box’s M test. As this test is very sensitive, an alpha level of $p > .001$ was used. This test was not always non-significant, although Tabachnik and Fidell (2001) cautioned that Box’s M could be too strict with a large sample size. In those analyses when the homogeneity of variance-covariance matrices was violated, I used Pillai’s criterion (Conlon, 2003).

**Data Analysis**

The purpose of Study 3 was to test the full range of hypotheses. The main impact tested for was the effectiveness of the Locus (internal, external) and Controllability (controllable, uncontrollable) Crises, Account (silence, denial, excuse, justification, confession) and Harm level (high, low) against the hypothesized dependent variables using appropriate tests. A number of other predictions had been made. The two Crisis types and Harm were expected to have main and interaction effects on the full range of dependent variables. Account had been predicted to impact a smaller range of dependent variables. In addition, different clusters of variables were expected to impact emotions, behaviour and attitude, while demographic variables had been predicted to impact emotions and behaviour. Refer to Table 40 for details of analyses performed.
<table>
<thead>
<tr>
<th>Tests carried out</th>
<th>Steps in testing</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Test effectiveness of two Crisis types: impact of IVs of Locus Crisis and</td>
<td>T-tests</td>
<td>Manipulation checks</td>
</tr>
<tr>
<td>Controllability Crisis on manipulation check for Crisis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Test effectiveness of Account against manipulation checks</td>
<td>MANOVA, then</td>
<td>Manipulation checks</td>
</tr>
<tr>
<td>(a) Testing Account against descriptors of five different accounts</td>
<td>ANOVAs</td>
<td></td>
</tr>
<tr>
<td>(b) Matching the Account against one of five descriptors</td>
<td>Chi-square</td>
<td></td>
</tr>
<tr>
<td>(c) Testing credibility of each Account</td>
<td>ANOVA</td>
<td></td>
</tr>
<tr>
<td>3. Test perceptions of Harm against manipulation check</td>
<td>T-test</td>
<td>Manipulation check</td>
</tr>
<tr>
<td>4. Test for interaction and a main effect between Accounts, Locus and</td>
<td>MANOVA</td>
<td>1</td>
</tr>
<tr>
<td>Controllability Crises and Harm on emotions, behaviour, attitude, responsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Test for impact of Account IV (five levels) on DVs – post-hoc</td>
<td>Follow-up</td>
<td>2</td>
</tr>
<tr>
<td>• emotions</td>
<td>ANOVAs</td>
<td>3</td>
</tr>
<tr>
<td>• behavioural intents</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>• attitude</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>• responsibility and accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Test for impact of two Crisis types IVs on hypothesised DVs</td>
<td>MANOVA</td>
<td>6</td>
</tr>
<tr>
<td>• emotions</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>• behavioural intents</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>• attitude</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>• involvement, attributions, responsibility and accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Test for impact of Crisis type IVs on DVs – post-hoc</td>
<td>Follow-up</td>
<td>10</td>
</tr>
<tr>
<td>• emotions</td>
<td>checks using</td>
<td></td>
</tr>
<tr>
<td>• behaviour</td>
<td>Bonferroni</td>
<td></td>
</tr>
<tr>
<td>• attitude</td>
<td>adjustment</td>
<td></td>
</tr>
<tr>
<td>• involvement, attributions, responsibility, accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Test for Impact of Harm on DVs – post-hoc</td>
<td>Follow-up check</td>
<td>19</td>
</tr>
<tr>
<td>9. Test for:</td>
<td>Multiple</td>
<td>10</td>
</tr>
<tr>
<td>Attributions → emotions</td>
<td>regression</td>
<td>11</td>
</tr>
<tr>
<td>Involvement → emotions</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Responsibility → emotions</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Accountability → emotions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attributions → behaviour</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Emotions → behaviour</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Responsibility → behaviour</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Accountability → behaviour</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Attitude → behaviour</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Emotions → attitude</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>10. Demographic Variables</td>
<td>MANCOVA</td>
<td>17a</td>
</tr>
<tr>
<td>Education → emotions and behaviour</td>
<td></td>
<td>17b</td>
</tr>
<tr>
<td>Income → emotions and behaviour</td>
<td></td>
<td>17c</td>
</tr>
<tr>
<td>Gender → emotions and behaviour</td>
<td></td>
<td>17d</td>
</tr>
<tr>
<td>Age → emotions and behaviour</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Test 1: Checking the Effectiveness of Crisis Scenarios

The effectiveness of each of the two Crisis types, operationalised in the news story scenarios with different crisis causes, was checked against a 2-item manipulation check.

**Impact of Locus and Controllability Crises on Manipulation Check**

To check the effectiveness of the Crisis scenarios, I compared the scores for the Locus Crisis type (internal, external) against its manipulation check (wholly internal to the company/wholly external), and the Controllability Crisis type (controllable, uncontrollable) against its manipulation check (highly controllable/highly uncontrollable) using two independent samples t-tests.

There was a significant difference between the internal ($M = 2.53, SD = 1.68$) and external ($M = 3.99, SD = 1.78$) crisis, $t(871) = -12.48, p < .001, \eta^2 = .15$, and between the controllable ($M = 2.83, SD = 1.75$) and uncontrollable ($M = 3.99, SD = 1.74$) crisis, $t(881) = -9.865, p < .001, \eta^2 = .15$, both showing large effect sizes. In sum, the Crisis types were perceived as intended (for full results see Appendix 7.9.1 and for boxplots, see Appendix 7.9.2).

**Interpretation.**

The internal crisis was perceived as more internal, while the external crisis was perceived as more external. The controllable crisis was perceived as more controllable, while the uncontrollable crisis was more perceived as more uncontrollable.

Test 2: The Effectiveness of Account Manipulation Checks

Two manipulation checks tested whether the five different Accounts were perceived as they were intended (i) one check with descriptors of five Accounts and (ii) one check, which was a 1-item question. As well, (iii) there was credibility test for each Account.

**(i) Checking the Account against 5-item Manipulation Check**

Participants were asked to identify the degree to which the CEO’s account that they read matched one of five different Account descriptions. As the IV of Account had five levels and there were five different descriptors, a one-way MANOVA was first used.
Box’s M test for homogeneity of variance between groups was violated, as was Levene’s test of equality of error variances for all variables \((p < .05)\), indicating that all cells did not have equal variances. As a result, Pillai’s Trace was used and indicated a statistically significant \((p < .001)\) difference between Accounts on the combined dependent variables, \(F(20, 3404) = 97.82, p < .001\), Pillai’s Trace = 1.460, partial \(\eta^2 = .365\).

After finding that the groups differed, variables contributing most to the overall difference were determined through tests of between-subjects effects results using a post-hoc procedure. Using a Bonferroni adjustment to reduce the chance of a Type 1 error, the alpha was set higher at .01 \((.05/5\) dependent variables). On the tests, all Accounts were significant \((p < .001)\).

Follow-up one-way ANOVAs using Tukey’s HSD were used as a post-hoc test to find where significant differences lay for the Accounts. Because Levene’s test was violated for all variables, a more conservative alpha of .01 was set in the univariate F-test (Pallant, 2001; Tabachnik & Fidell, 2001). Results are tabulated in Table 41.

For the Accounts of “no comment”, “denial”, “justification” and “confession”, there was a statistically significant difference in mean scores between these and all other Accounts, indicating that these were perceived as intended (see Appendices 7.10.1 to 7.10.5 for details and means plots). However, for the Account of “excuse”, while there was a statistically significant difference between this account and the accounts of “no comment” and “confession”, there was no statistically significant difference between “excuse” and “denial” or “justification”. Refer to Appendix 7.10.3 for details means plot of “excuse”.
Table 41 ANOVA showing results of 5-item manipulation check for Accounts

<table>
<thead>
<tr>
<th>Account</th>
<th>ANOVA results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
</tr>
<tr>
<td>No Comment</td>
<td>4.81</td>
</tr>
<tr>
<td>Denial</td>
<td>2.01***</td>
</tr>
<tr>
<td>Excuse</td>
<td>3.27***</td>
</tr>
<tr>
<td>Justification</td>
<td>1.66***</td>
</tr>
<tr>
<td>Confession</td>
<td>1.37***</td>
</tr>
</tbody>
</table>

*** Significantly different at the .01 level.
Interpretation.

The results indicated that participants who received the Accounts of “no comment”, “denial”, “justification” and “confession” effectively matched the Account they received with the Account description. Participants who received the “excuse” account found it difficult to differentiate between this Account and the descriptors for “justification” and “denial”, with “denial” receiving the highest mean score. This was unusual in view of the finding that those receiving the “justification” or “denial” accounts differentiated both from the “excuse” descriptor. This was not an ordering effect as “confession” was listed first.

(ii) Checking Accounts on the 1-item Account Descriptor

This second manipulation check was a 1-item measure. Participants were asked to select one Account that most closely described the Account given by the airline company’s CEO. As both independent and dependent variables were categorical, a chi-square test for independence examined the effect of the Account (five levels) against the Account manipulation check (five levels). The assumption regarding minimum expected cell frequency of five or greater was not violated. The Pearson Chi-square value was significant, $\chi^2 = 1750.90, p < .001$, indicating that the Accounts were significantly different. Full details are in Appendix 7.11. In Table 42, these results were compared with those from Study 2, where less successful Accounts were adjusted following each Pilot. Following the success of Accounts against the check in Pilot 3, only the Account of “justification” was adjusted for Study 3.

<table>
<thead>
<tr>
<th>Account</th>
<th>Study 2, Pilot 2</th>
<th>Study 2, Pilot 3</th>
<th>Study 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Comment</td>
<td>66.7%</td>
<td>87.5%</td>
<td>87.3%</td>
</tr>
<tr>
<td>Denial</td>
<td>75%</td>
<td>75%</td>
<td>41.8%</td>
</tr>
<tr>
<td>Excuse</td>
<td>50%</td>
<td>100%</td>
<td>79.7%</td>
</tr>
<tr>
<td>Justification</td>
<td>41.7%</td>
<td>62.5%</td>
<td>65.1%</td>
</tr>
<tr>
<td>Confession</td>
<td>58.3%</td>
<td>87.5%</td>
<td>85.7%</td>
</tr>
</tbody>
</table>

As the results showed, there was a slight improvement in results for “justification” from Study 2 to 3. In addition, the finding that these Accounts were successful in the student group indicated that the results were not due to poor operationalisation. One explanation is that a general population sample may have been less successful in distinguishing between Accounts than a more educated student sample, who would be potentially more familiar with questionnaires.
However, the fall in the success of the “denial” Account was surprising, was not due to ordering effects, and indicated that the general population sample had difficulty distinguishing between Accounts of “denial” and “excuse”.

**Interpretation of both tests.**

Results indicated that, for the first manipulation check, participants who received the Account of “excuse” had difficulty differentiating it from both “justification” and “denial”. However, for the sub-sample who received the “excuse” vignette, the mean was highest for “excuse”. However, in the second manipulation check, “denial” was problematic, despite being previously successful with the Study 2 student group, with more Study 3 participants identifying it as “excuse”. The remainder of the Accounts were clearly perceived as intended. An examination of the boxplots (discussed in Appendix 7.6) showed that this was not the effect of outliers. One further explanation was that participants gauged these Accounts as relatively similar. Therefore, the results for Accounts were interpreted with this in mind.

**(iii) Checking the Credibility of Accounts**

I checked Account credibility using a one-way ANOVA. There was a statistically significant difference at the $p < .05$ level in scores for the five Accounts, $F(4, 867) = 38.91, p < .001, \eta^2 = .15$. To determine where differences lay, I conducted a post-hoc test using Tukey’s HSD. Because Levene’s test was not violated ($p > .05$), alpha remained at .05.

Post-hoc comparisons indicated that the mean score for “no comment” ($M = 3.82, SD = 1.84$) was significantly different from “denial”, “justification” and “confession”; “denial” ($M = 3.06, SD = 1.70$) was significantly different from “no comment” and “confession”; “excuse” ($M = 3.50, SD = 1.76$) was significantly different from “justification” and “confession”; “justification” ($M = 2.92, SD = 1.58$) was significantly different from “no comment”, “excuse” and “confession”; “confession” ($M = 4.92, SD = 1.66$) was significantly different from all Accounts. See Appendix 7.12 for the means plot for Account credibility.

**Interpretation.**

Overall, the most credible Account was “confession” followed by “no comment”, “excuse”, then “denial”, with “justification” proving the least credible of all responses. Keeping in mind the results from the Account manipulation checks, it can be noted that successful matching of the Account does not appear to be related to perceived credibility.
Test 3: Checking Harm Against the Manipulation Check

The independent variable of Harm had two levels, high injury (33 dead) and low injury (33 injured, none seriously). I examined this against the manipulation check measuring the perceived difference in critical injury levels using an independent samples T-test. There was a significant difference between the groups ($p < .001$) for the scenarios featuring high levels of harm ($M = 5.62, SD = 1.52$) to those showing lower levels of harm ($M = 4.86, SD = 1.98$). The effect size was small to moderate ($0.04$). See Appendix 7.13 for the box plot.

Interpretation.

The results indicated that the IV of Harm was perceived as intended: “higher harm” was viewed as causing more severe injuries than “lower harm”. The mean for lower harm was still quite high and showed higher variance.

Test 4: Interaction And A Main Effect Of The IVs On Hypothesised DVs.

A 2 x 2 x 2 x 5 design factorial between-groups MANOVA was conducted to investigate the impact of four factors – Locus Crisis (internal, external), Controllable Crisis (controllable, uncontrollable), Harm level (higher, lower) and Account (no comment, denial, excuse, justification, confession) on the 11 dependent variables that all were hypothesised to impact: responsibility, accountability, emotions (anger, fear, surprise, joy, sympathy), behavioural intentions (complaining, loyalty and disloyalty) and attitude.

Results of MANOVA

Box’s M test for homogeneity of variance between the groups was violated ($p < .001$) although Tabachnik and Fidell (2001) indicated that this could be ignored when sample sizes were equal. Bartlett’s test of sphericity was significant ($p < .05$), therefore the assumption was not violated. Most variables violated Levene’s test of equality of error variances: accountability, responsibility, emotions of anger and joy, and behavioural intentions of complaining and loyalty, and attitude. The multivariate tests showed no significant interaction effects. There was a main effect for Locus Crisis, $F(11, 717) = 8.212$, $p < .001$, Pillai’s trace $= .112$, partial $\eta^2 = .112$, Controllable Crisis, $F(11, 717) = 11.646$, $p < .001$, Pillai’s trace $= .152$, partial $\eta^2 = .152$, and Account, $F(44, 2880) = 2.828$, $p < .001$, Pillai’s trace $= .171$, partial $\eta^2 = .043$. Pillai’s trace was used due to assumption violations. There was no main effect for Harm. This was introduced as a factor following Study 2 (Pilot 4), which found that high impact (33 deaths) and low impact (33 injuries, none severe) situations were perceived as significantly different. While retaining the failed factor would be a more valid representation of the actual study, it had no purpose, would not be reported in any journal.
Box’s M test for homogeneity of variance between the groups was violated ($p < .005$). Bartlett’s test of sphericity was significant ($p < .05$). Most variables violated Levene’s test of equality of error variances: accountability, responsibility, anger, joy, complaining, loyalty and attitude. As a result of violating this assumption, a more conservative alpha level of .01 was set to determine significance for these variables in the post-hoc univariate F-test, rather than the conventional .05 level (Tabachnik & Fidell, 2001). Pillai’s trace criterion was used due to the assumptions being violated, although the F-statistic for Wilks’ lambda was either identical, or nearly so.

There were no significant interactions between the three IVs on the combined DV, but there was a main effect for Locus Crisis, $F(11, 737) = 8.536$, $p < .001$, Pillai’s trace = .113, partial $\eta^2 = .113$, Controllability Crisis, $F(11, 737) = 11.964$, $p < .001$, Pillai’s trace = .152, partial $\eta^2 = .152$ and Account (no comment, denial, excuse, justification, confession), $F(44, 2960) = 2.972$, $p < .001$, Pillai’s trace = .169, partial $\eta^2 = .042$.

It was then necessary to determine which variables contributed most to the overall difference through investigation of the results of tests of between-subjects effects using a post-hoc procedure. Because there were 11 dependent variables, to reduce the chance of a Type 1 error, I set the alpha level to a more stringent .005 using a Bonferroni adjustment (.05/11). An examination of the significance column of the tests then showed that for Locus Crisis, Controllable Crisis and Account, there was a number of significant results for individual DVs below this level, as shown in Table 43. The importance of the impact of the IVs on the DVs was evaluated using the effect size statistic, partial eta squared, representing the proportion of the variance in the DV explained by the IV (Pallant, 2000).
Table 43 Dependent variables that exhibited sig. differences after Bonferroni adjustment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Account</th>
<th>Locus Crisis</th>
<th>Controllability Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
<td>$p$</td>
<td>$\eta^2$</td>
</tr>
<tr>
<td>account</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>responsib</td>
<td>5.379</td>
<td>&lt; .001</td>
<td>.028</td>
</tr>
<tr>
<td>anger</td>
<td>12.150</td>
<td>&lt; .001</td>
<td>.061</td>
</tr>
<tr>
<td>fear</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>surprise</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>joy</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>sympathy</td>
<td>8.639</td>
<td>&lt; .001</td>
<td>.044</td>
</tr>
<tr>
<td>complain</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>disloyalty</td>
<td>4.226</td>
<td>.002</td>
<td>.022</td>
</tr>
<tr>
<td>loyalty</td>
<td>5.485</td>
<td>&lt; .001</td>
<td>.029</td>
</tr>
<tr>
<td>attitude</td>
<td>12.260</td>
<td>&lt; .001</td>
<td>.062</td>
</tr>
</tbody>
</table>

Test 5. Impact of Account on Dependent Variables: Post-Hoc Testing

To identify the significant DVs for Account, follow-up ANOVAs using Tukey’s HSD as a post-hoc test were conducted for each of those DVs indicated by the Bonferroni adjustment: responsibility, anger, sympathy, disloyalty, loyalty, and attitude. Because Levene’s test was violated for responsibility, anger, loyalty, and attitude, the alpha was set to a lower level of .01 for those variables.

For anger, there was a statistically significant difference at the $p < .01$ level in scores – see Table 44. Post-hoc comparisons using Tukey’s HSD indicated that the mean score for “confession” was significantly different from those for “denial”, “excuse” and “justification”. “No comment” was also significantly different from “justification”. The effect size was moderate. See Appendix 7.14.1 for the means plot showing impact of Account on anger.

For sympathy, there was a statistically significant difference at the $p < .05$ level in scores – see Table 44. Post-hoc comparisons using Tukey’s HSD indicated that the mean score for “confession” was significantly different from those for “denial”, “excuse” and “justification”, but not from that of “no comment”. The effect size was small to moderate. See Appendix 7.14.2 for the means plot.
<table>
<thead>
<tr>
<th>Account</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>η²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Comment</td>
<td></td>
<td></td>
<td>Denial</td>
<td></td>
<td></td>
<td></td>
<td>Excuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.09</td>
<td>1.81</td>
<td>4.64</td>
<td>1.79</td>
<td>4.65</td>
<td>1.75</td>
<td>4.75</td>
<td>1.64</td>
<td>3.76</td>
<td>1.73</td>
<td>10.74</td>
</tr>
<tr>
<td>Sympathy</td>
<td>3.36</td>
<td>1.59</td>
<td>3.06</td>
<td>1.62</td>
<td>2.91</td>
<td>1.55</td>
<td>3.03</td>
<td>1.45</td>
<td>3.76</td>
<td>1.57</td>
<td>8.55</td>
</tr>
<tr>
<td>Disloyalty</td>
<td>3.72</td>
<td>2.13</td>
<td>4.26</td>
<td>2.00</td>
<td>4.36</td>
<td>2.12</td>
<td>4.26</td>
<td>2.15</td>
<td>3.69</td>
<td>2.09</td>
<td>4.08</td>
</tr>
<tr>
<td>Loyalty</td>
<td>2.37</td>
<td>1.23</td>
<td>2.14</td>
<td>1.22</td>
<td>2.15</td>
<td>1.16</td>
<td>2.06</td>
<td>1.15</td>
<td>2.57</td>
<td>1.28</td>
<td>5.34</td>
</tr>
<tr>
<td>Attitude</td>
<td>3.08</td>
<td>1.59</td>
<td>2.81</td>
<td>1.58</td>
<td>2.77</td>
<td>1.50</td>
<td>2.82</td>
<td>1.37</td>
<td>3.64</td>
<td>1.55</td>
<td>10.23</td>
</tr>
<tr>
<td>Responsibility</td>
<td>4.88</td>
<td>1.60</td>
<td>5.06</td>
<td>1.58</td>
<td>5.41</td>
<td>1.47</td>
<td>5.25</td>
<td>1.44</td>
<td>4.95</td>
<td>1.58</td>
<td>3.54</td>
</tr>
</tbody>
</table>

a indicator variable that was significantly different from b variables at the p < .01 level;

b indicator variable that was significantly different from c variables at the p < .01 level;

c indicator variable that was significantly different from d variables at the p < .01 level;

d indicator variable that was significantly different from e variable at the p < .025 level.
For disloyalty, there was a statistically significant difference at the $p < .05$ level in scores – see Table 44. Post-hoc comparisons using Tukey’s HSD indicated that the mean score for “excuse” was significantly different from those for “confession” and “no comment”. The effect size was small. See Appendix 7.14.3 for the means plot.

For loyalty, there was a statistically significant difference at the $p < .01$ level in scores – see Table 44. Post-hoc comparisons using Tukey’s HSD indicated that the mean score for “confession” was significantly different from those for “denial” and “justification”. The effect size was small. See Appendix 7.14.4 for the means plot.

For attitude, there was a statistically significant difference at the $p < .01$ level in scores – see Table 44. Post-hoc comparisons using Tukey’s HSD indicated that the mean score for “confession” was significantly different from those for “no comment”, “denial”, “excuse” and “justification”. The effect size was moderate. See Appendix 7.14.5 for the means plot.

For responsibility, there was a statistically significant difference at the $p < .05$ level in scores – see Table 44. Post-hoc comparisons using Tukey’s HSD indicated that “excuse” and “no comment” were significantly different from each other at the .025 level. The effect size was small. See Appendix 7.14.6 for the means plot.

**Interpretation.**

Account had been hypothesized to interact with the different Crisis types, resulting in different accounts performing better in different crises. However, as there were no interaction effects, this did not occur.

While it had been expected that Account would impact all emotions, it impacted only anger and sympathy. It had been predicted that “confession” would result in the lowest anger followed by “justification” and “excuse”, with highest anger for “denial” and “no comment”. Instead, the ranking from lowest anger to highest anger was “confession”, “no comment”, “denial”, “excuse” and “justification”. This was in contrast to the prediction (developed from findings from Weiner et al.’s 1987 interpersonal study) that “no comment” would generate the highest anger and “confession” the lowest. Although “confession” was significantly different from, and received a lower anger rating to, “denial”, “excuse”, and “justification”, these responses each received similar anger ratings. This may have been due to the low levels of differentiation between these accounts, as seen in the manipulation checks. “Justification” received the highest anger rating. As a study by Garrett et al. (1989) found that “justification” was high ranking executives’ most commonly used Account (constituting 72.1% of
responses), therefore the finding that it may generate the highest anger is of import. This finding was congruent with Holtgraves’ (1989) interpersonal hierarchy, which found that an audience was least satisfied with “justification”.

I had predicted that “confession” would result in highest sympathy followed by “justification” and “excuse”, with lowest sympathy for “denial” and “no comment”. The results indicated that highest sympathy was for “confession”, then “no comment”, “denial”, “justification”, then “excuse”. “Confession” was significantly different from, and received a higher sympathy rating than, “denial”, “excuse” and “justification”, which were not significantly different from each other. Again, this could be due to the lack of differentiation between these accounts. Thus Hypothesis 2 regarding emotions was supported only for “confession”.

The prediction was made that “confession” would result in lowest negative behaviour (disloyalty and complaining), followed by “justification” and “excuse”, with highest disloyalty for “denial” and “no comment”. However, complaining was non-significant. For disloyalty intentions, as predicted, “confession” resulted in the lowest negative behaviour, although it was not significantly different from “no comment”. Results indicated that the consumer-preferred ranking order was “confession”, “no comment”, “denial”, “justification” and “excuse”. “Denial”, “justification” and “excuse” attracted very similar disloyalty intent, and did not differ significantly.

As predicted, “confession” resulted in the highest level of loyalty intent. “Confession” was expected to be followed by “excuse” and “justification”, then “denial” and “no comment”. However, “no comment” was not significantly different from “confession” and received second highest loyalty rating, followed by “excuse” then “denial” and “justification”. These last three accounts received similarly low loyalty ratings, with “justification” receiving the lowest. Thus Hypothesis 3 regarding behavioural intentions was supported only for “confession”.

As predicted, attitude to the company was significantly higher, that is, better, for “confession”, which was significantly different from all other accounts. Again, the predicted ordering of “confession”, “justification”, “excuse”, “denial” and “no comment” was not supported, with the ordering instead being “confession”, “no comment”, “denial”, “justification” and “excuse”, with the latter three accounts receiving similarly low results. Hypothesis 4 held for “confession”. Findings for “confession” were congruent with findings from a negative publicity study by Griffin et al. (1991), in which “redress” resulted in better
attitudes, in contrast with the researchers’ “denial” and “no response” conditions, which displayed virtually identical lower scores.

Account had been predicted to impact on accountability and responsibility, in line with Weiner’s (1995) contention. However, there was a small effect for responsibility only, with “excuse” receiving the highest responsibility judgment, being significantly different only from “no comment”, which received a similarly low responsibility judgment to “confession”.

As earlier argued, Account is one of the few tools available to managers to mitigate negative impact on the company following a crisis. My study found that company-directed anger was lowest following a “confession”. This was followed by “no comment”, with “denial” and “excuse” receiving similar higher anger levels, with anger highest in “justification”. Sympathy was highest for “confession”, followed by “no comment”, “denial” and “justification”, but lowest for “excuse”. Loyalty was highest when the company gave a “confession”, followed by “no comment”, “denial” and “excuse”, with “justification” receiving the lowest loyalty. Positive attitude to the company was significantly higher when there was a “confession” followed by “no comment”, then “denial”, with “justification” receiving similar results and “excuse” the lowest positive attitude. One possible explanation for the relative success of “no comment” may be that, as the CEO had not commented on the crisis cause, consumers’ judgments were withheld until a comment was made. As Hamilton and Sanders (1992) noted, until we hear the answer, we usually do not know whether or how much to blame someone for an act of wrong-doing. The lack of differentiation between the Accounts of “denial”, “excuse” and “justification” in the general population sample, despite the success in the more highly educated student population sample, indicated that this may not have been due to poor operationalisation of Account. However, it indicates that a general population sample was required to test the operationalisation of Account.

Test 6: Impact of Crisis Types on Hypothesised Dependent Variables

Locus Crisis and Controllability Crisis were predicted to impact a wider range of variables than Account (i.e., involvement and attributions, as well as responsibility, accountability, emotions, behaviour and attitudes). In addition, as they were predicted to interact with each other, a MANOVA was run.

Box’s M test was violated, as was Levene’s test for most of the dependent variables. There was no interaction between Locus Crisis and Controllability Crisis. There was a main effect for Locus Crisis, $F(15, 704) = 19.254, p < .001$, Pillai’s trace $= .291$, partial $\eta^2 = .291$
and Controllability Crisis, $F(15, 704) = 10.638, p < .001$, Pillai’s trace = .185, partial $\eta^2 = .185$. Variables contributing most to the overall difference were investigated through results of tests of between-subjects effects using a post-hoc procedure in Test 7.

**Test 7: Impact of Locus and Controllability Crisis types on Dependent Variables – Post-Hoc**

Because there were 15 dependent variables, to reduce the chance of a Type 1 error, I set the alpha level higher to .003 using a Bonferroni adjustment (.05/15). An examination of the significance column of the tests of between-subjects effects then showed that for Locus Crisis and Controllability Crisis there were a number of significant results for individual DVs below this level. The importance of the impact of the IVs on the DVs was evaluated using the effect size statistic, partial eta squared. As each Crisis type had two levels, the differences in results were identified using estimated marginal means.

**(a) Locus Crisis on DVs**

Locus Crisis had been hypothesized to impact all 15 dependent variables. Following the Bonferroni adjustment, there were significant results for most dependent variables except involvement, sympathy, surprise and complaining – see Table 45.

**Table 45 Dependent variables that exhibited sig. differences for Locus Crisis**

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Locus Crisis</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal</td>
<td>External</td>
<td>DF</td>
<td>$F$</td>
<td>$p$</td>
<td>Partial $\eta^2$</td>
</tr>
<tr>
<td>Attribution: locus</td>
<td>2.23</td>
<td>3.87</td>
<td>1</td>
<td>258.940</td>
<td>&lt; .001</td>
<td>.265</td>
</tr>
<tr>
<td>Accountability</td>
<td>6.07</td>
<td>5.17</td>
<td>1</td>
<td>74.840</td>
<td>&lt; .001</td>
<td>.094</td>
</tr>
<tr>
<td>Responsibility</td>
<td>5.57</td>
<td>4.74</td>
<td>1</td>
<td>65.816</td>
<td>&lt; .001</td>
<td>.084</td>
</tr>
<tr>
<td>Attribution: ext.contr</td>
<td>3.50</td>
<td>4.34</td>
<td>1</td>
<td>56.806</td>
<td>&lt; .001</td>
<td>.073</td>
</tr>
<tr>
<td>Attribution: int.contr</td>
<td>5.51</td>
<td>4.87</td>
<td>1</td>
<td>38.393</td>
<td>&lt; .001</td>
<td>.051</td>
</tr>
<tr>
<td>Anger</td>
<td>4.73</td>
<td>4.09</td>
<td>1</td>
<td>26.479</td>
<td>&lt; .001</td>
<td>.036</td>
</tr>
<tr>
<td>Disloyalty</td>
<td>4.45</td>
<td>3.70</td>
<td>1</td>
<td>24.499</td>
<td>&lt; .001</td>
<td>.033</td>
</tr>
<tr>
<td>Loyalty</td>
<td>2.02</td>
<td>2.45</td>
<td>1</td>
<td>23.939</td>
<td>&lt; .001</td>
<td>.032</td>
</tr>
<tr>
<td>Fear</td>
<td>5.06</td>
<td>4.55</td>
<td>1</td>
<td>15.291</td>
<td>&lt; .001</td>
<td>.021</td>
</tr>
<tr>
<td>Attitude</td>
<td>2.80</td>
<td>3.22</td>
<td>1</td>
<td>14.361</td>
<td>&lt; .001</td>
<td>.020</td>
</tr>
<tr>
<td>Joy</td>
<td>2.09</td>
<td>2.43</td>
<td>1</td>
<td>13.492</td>
<td>&lt; .001</td>
<td>.018</td>
</tr>
</tbody>
</table>
The $F$-tests and effect size statistics showed that attribution of locus (internal/external) contributed 26.2% to the effect for Locus Crisis, with the other attributions also contributing significantly. This made sense as attributions, in effect, acted as a manipulation check for Crisis type. This also provided further indication that Locus Crisis was perceived as intended. Causal attributions aside, accountability contributed strongly to the effect, followed by responsibility, anger, disloyalty, loyalty, fear, attitude, and joy.

For emotions, as hypothesized, anger and fear were significantly higher in an internal crisis than an external crisis, while joy was lower in an internal crisis and higher in an external crisis. Of the variance in the perceived Locus Crisis scores, anger accounted for 3.5%, fear 2.0% and joy 1.7% of the variance, while surprise and sympathy did not have significant effects. Hypothesis 6 was therefore mostly supported.

For behavioural intentions, as hypothesized, disloyalty was significantly higher in an internal crisis and lower in an external crisis, while loyalty was significantly lower in an internal crisis and higher in an external crisis. Of the variance in the perceived Locus Crisis scores, disloyalty accounted for 3.1% and loyalty 2.8% of variance. There were no significant effects for complaining. Hypothesis 7 was mostly supported.

Attitude toward the company was rated as more positive, that is, higher in an external crisis than in an internal crisis, as hypothesized. Attitude explained 1.9% of the variance in Locus Crisis scores. Thus Hypothesis 8 was supported.

Hypotheses 9a was upheld for responsibility, accountability and attributions, but not involvement. The more internal the crisis, the more responsible and accountable the company was deemed to be, while the more external the crisis, the less responsible and accountable the company. The attribution of locus had by far the strongest effect for Locus crisis, however this effectively acted as a manipulation check. Attributions aside, accountability received the highest mean score of any DV, contributing to 9.6% of the effect, followed by responsibility explaining 8.5% of Locus Crisis’ variance.

(b) Impact of Controllability Crisis Type on DVs

Controllability Crisis was hypothesized to impact all 15 dependent variables. Following the Bonferroni adjustment, the tests of between-subjects effects showed significant results for all hypothesized DVs, except for involvement, surprise and fear, as shown in Table 46. The importance of the impact of this Crisis type on these variables was evaluated using the effect size statistic, partial eta squared.
### Table 46 Dependent variables that exhibited sig. difference for Controllability Crisis type

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Controllable crisis</th>
<th>Uncontrollable crisis</th>
<th>DF</th>
<th>F</th>
<th>p &lt; .005</th>
<th>Partial ( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribution: int.contr</td>
<td>5.76</td>
<td>4.65</td>
<td>1</td>
<td>118.688</td>
<td>&lt; .001</td>
<td>.142</td>
</tr>
<tr>
<td>Accountability</td>
<td>6.08</td>
<td>5.17</td>
<td>1</td>
<td>78.339</td>
<td>&lt; .001</td>
<td>.098</td>
</tr>
<tr>
<td>Responsibility</td>
<td>5.60</td>
<td>4.72</td>
<td>1</td>
<td>72.769</td>
<td>&lt; .001</td>
<td>.092</td>
</tr>
<tr>
<td>Attitude</td>
<td>2.63</td>
<td>3.39</td>
<td>1</td>
<td>42.436</td>
<td>&lt; .001</td>
<td>.056</td>
</tr>
<tr>
<td>Attribution: ext.contr</td>
<td>3.63</td>
<td>4.20</td>
<td>1</td>
<td>25.161</td>
<td>&lt; .001</td>
<td>.034</td>
</tr>
<tr>
<td>Anger</td>
<td>4.82</td>
<td>3.98</td>
<td>1</td>
<td>46.447</td>
<td>&lt; .001</td>
<td>.061</td>
</tr>
<tr>
<td>Attribution: locus</td>
<td>2.72</td>
<td>3.37</td>
<td>1</td>
<td>44.638</td>
<td>&lt; .001</td>
<td>.059</td>
</tr>
<tr>
<td>Sympathy</td>
<td>2.82</td>
<td>3.55</td>
<td>1</td>
<td>36.948</td>
<td>&lt; .001</td>
<td>.049</td>
</tr>
<tr>
<td>Disloyalty</td>
<td>4.46</td>
<td>3.70</td>
<td>1</td>
<td>24.863</td>
<td>&lt; .001</td>
<td>.033</td>
</tr>
<tr>
<td>Complain</td>
<td>2.99</td>
<td>2.49</td>
<td>1</td>
<td>17.324</td>
<td>&lt; .001</td>
<td>.024</td>
</tr>
<tr>
<td>Loyalty</td>
<td>2.06</td>
<td>2.40</td>
<td>1</td>
<td>14.740</td>
<td>&lt; .001</td>
<td>.020</td>
</tr>
<tr>
<td>Joy</td>
<td>2.09</td>
<td>2.41</td>
<td>1</td>
<td>10.265</td>
<td>&lt; .001</td>
<td>.014</td>
</tr>
</tbody>
</table>

The F-tests and effect sizes indicated that, for Controllability Crisis, attribution of internal controllability had the strongest effect. This was expected, as attributions to some extent acted as a manipulation check for Crisis type. Attributions aside, accountability had the strongest effect, followed by responsibility, then attitude, anger, sympathy, then intents of disloyalty, complaining and loyalty, then joy.

Results for emotions indicated that, as hypothesized, anger was higher in a controllable crisis, than in an uncontrollable crisis, while joy and sympathy were lower in a controllable crisis than in an uncontrollable crisis. The strongest emotion effect was for anger, which accounted for 5.9% of the variance, then sympathy explaining 5.4%, and joy 1.7% of the variance. Thus Hypotheses 6a and 6b were mostly supported.

For behavioural intent, as hypothesized, disloyalty and complaining were higher in a controllable crisis than in an uncontrollable one, while loyalty was higher in an uncontrollable crisis than in a controllable one. Of the variance in Controllability Crisis, 3.5% was explained by disloyalty, 2.3% by complaining and 2.1% by loyalty. Thus Hypothesis 7a and 7b were supported.
Hypothesis 8, that an uncontrollable crisis (compared to a controllable one) would lead to a higher attitude, was upheld. Attitude explained 6.1% of this Crisis’ variance.

Hypotheses 9c and 9d were also upheld for responsibility, accountability and attributions. The attribution of internal controllability had by far the strongest effect for the Controllability crisis, however this effectively acted as a manipulation check. The more controllable the crisis, the more responsible and accountable the company was deemed to be, while the more uncontrollable the crisis, the less responsible and accountable the company was deemed to be. In addition, accountability explained 9.6% of the variance, while responsibility accounted for 9.2%.

Discussion

Main and interaction effects had been predicted for Locus Crisis and Controllability Crisis, however this did not occur, except for locus attribution. Thus Hypothesis 1 was mostly not supported. Both Crisis types most strongly impacted attributions, congruent with findings of researchers such as Jorgensen (1996).

Both Crisis types impacted a range of emotions. As the literature on company crises and service failures using Weiner’s (1986) Attribution Theory had investigated only the elicitation of emotions of anger and sympathy, these findings added substantially to the literature. Although both crises generated significant levels of anger and joy, Locus Crisis also elicited fear and surprise, while Controllability Crisis elicited sympathy.

Both Crisis types also impacted behavioural intents. This study found that the Locus Crisis and the Controllability Crisis both led to significant levels of the behavioural intentions of disloyalty and loyalty, while the Controllability Crisis also led to complaining intent. This added to the findings of other researchers (e.g., Jorgensen, 1996), that different crises impacted purchase intention and investment intentions.

Regarding Locus Crisis, in the internal crisis, the company was judged to be more responsible and accountable, and consumer anger, fear, surprise and disloyalty were higher than in the external crisis. In contrast, in the external crisis, consumer joy, loyalty and attitude were higher than in the internal crisis. In addition, the F-tests showed that responsibility had the largest effect, followed by anger, disloyalty, loyalty, fear, joy and surprise.
Regarding the Controllability Crisis, in the controllable crisis, the company was judged as more responsible and accountable, and consumer anger, fear, complaining and disloyalty were higher. In contrast, joy, sympathy, loyalty and attitude were higher in the uncontrollable crisis.

Thus, in a crisis that is both internal and controllable, higher negative emotions and behaviour can be expected than for a crisis that was both external and uncontrollable. In addition, the $F$-tests showed that accountability, which had never been tested before in a crisis scenario, had the largest effect (apart from attributions), followed by responsibility, anger, attitude, disloyalty, complaining, loyalty, joy then fear.

**Test 8. Impact of Harm on Dependent Variables**

From the results of Study 2, where the high impact scenario with 33 deaths was perceived as significantly different to the low impact scenario with 33 injuries, it was hypothesized that differences in harm may result in different outcomes. Thus Harm level was established as an independent variable.

In Study 3, the low Harm crisis was perceived as significantly different from the high Harm crisis. However, there were no main or interaction effects between the independent variables of Harm, Account and Crisis types for the dependent variables of responsibility, accountability, emotions, behaviour and attitude. Thus Hypothesis 1 was not upheld.

However, in Hypothesis 19, introduced at the end of Study 2 in Chapter 6, in addition to the variables previously mentioned, Harm was also predicted to impact attributions (locus, internal controllability, external controllability) and involvement. As a result, the MANOVA was re-run testing impact on all hypothesised DVs, but showed no main effect, $F(15, 706) = .711, p > .05$, Wilks Lambda = .985. This was congruent with findings by Kaman Lee (2004) who examined Crisis Severity as an independent variable in an empirical study using an air crash scenario. Kaman Lee (2004) found no differences in effects between the severe condition (200 passengers and crew injured, 100 seriously) and extremely severe (300 passengers and crew killed) in either an internal controllable crisis or an external uncontrollable crisis.
It was predicted that variables of attributions (locus, internal controllability, external controllability), involvement, responsibility, and accountability would impact emotions, behaviour and attitude. This was tested using standard (simultaneous) multiple regression analysis in SPSS. Assumptions of normality had been previously addressed and multivariate outliers earlier deleted using Mahalanobis distance. Some of the issues considered were the squared semipartial correlation ($sr^2$) and specification error.

Some independent variables were highly correlated (see Table 39), such as accountability with both responsibility ($r = .78$) and internal controllability ($r = .75$). Also responsibility was correlated with internal controllability ($r = .73$), although the argument for maintaining each as a separate variable has previously been addressed. As a result of these correlations, the degree of multicollinearity using tolerance and variance inflation factor (VIF) was also investigated and in all tests showed no signs of problematic multicollinearity, as tolerance was never lower than .29 and VIF was not above 3.5 in the tests. As most of the IVs were correlated, the $sr^2$ did not sum to the $R^2$.

**Hypothesised Variables Predicting Emotions**

Five separate multiple regression analyses were conducted to examine whether the independent variables of locus attribution, internal controllability attribution, external controllability attribution, responsibility, accountability and involvement impacted the five emotions of anger, fear, joy, surprise, sympathy, as predicted.
(a) Hypothesised variables impacting anger.

The significant results for all predictor variables for anger are shown in Table 47. This presents the coefficients, significance tests and explained variance in the dependent variable for the predictor variables in the regression analysis, \( F(6, 835) = 95.68, p < .001 \). Four variables were significant and predicted 40.3% of the variance in anger: responsibility, followed by accountability, internal controllability, involvement, then external controllability (at \( p = .051 \)). Locus did not significantly impact anger. These results were somewhat expected, as the correlation matrix (see Table 39) indicated that anger was correlated with responsibility (\( r = .61 \)), accountability (\( r = .56 \)), and internal controllability (\( r = .52 \)). The residual scatterplots showed linear relationships between the variables, and homoscedasticity.

Table 47 Standard Regression Analysis showing significant predictors of anger

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
<th>( sr )</th>
<th>( sr^2 )</th>
<th>t</th>
<th>p</th>
<th>( R^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>.464</td>
<td>.054</td>
<td>.403</td>
<td>.227</td>
<td>.052</td>
<td>8.507</td>
<td>&lt; .001</td>
<td>.403</td>
</tr>
<tr>
<td>Accountability</td>
<td>.172</td>
<td>.054</td>
<td>.152</td>
<td>.085</td>
<td>.007</td>
<td>3.191</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Attribution of internal controllability</td>
<td>.114</td>
<td>.051</td>
<td>.098</td>
<td>.060</td>
<td>.004</td>
<td>2.245</td>
<td>.025</td>
<td></td>
</tr>
<tr>
<td>Involvement</td>
<td>.175</td>
<td>.051</td>
<td>.096</td>
<td>.092</td>
<td>.008</td>
<td>3.459</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Attribution of external controllability</td>
<td>.066</td>
<td>.034</td>
<td>.060</td>
<td>.052</td>
<td>.003</td>
<td>1.958</td>
<td>.051</td>
<td></td>
</tr>
</tbody>
</table>
(b) Hypothesized variables impacting fear.

A standard regression analysis was conducted in which all the variables were entered as predictors of fear. Table presents the coefficients, significance tests and explained variance in the dependent variable for the predictor variables in the regression analysis, \( F(6, 835) = 95.69, \ p < .001 \). Three variables contributed significantly to the prediction of fear. Responsibility was the strongest predictor, followed by involvement, then accountability.
Table 48 Standard Regression Analysis showing significant predictors of fear

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>sr</th>
<th>sr²</th>
<th>t</th>
<th>p</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>.326</td>
<td>.062</td>
<td>.280</td>
<td>.158</td>
<td>.025</td>
<td>5.264</td>
<td>&lt; .001</td>
<td>.250</td>
</tr>
<tr>
<td>Involvement</td>
<td>.434</td>
<td>.058</td>
<td>.235</td>
<td>.226</td>
<td>.051</td>
<td>7.545</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>.194</td>
<td>.061</td>
<td>.169</td>
<td>.095</td>
<td>.009</td>
<td>3.163</td>
<td>.002</td>
<td></td>
</tr>
</tbody>
</table>
(c) Hypothesized variables impacting joy.

The significant results from the regression analysis for the predictors of joy are shown in Table 49. This presents the coefficients, significance tests and explained variance in the dependent variable for the predictors in the regression analysis, $F(6, 828) = 30.23, p < .001$. Three variables contributed significantly to the prediction of joy. Accountability was the strongest predictor, followed by involvement, then responsibility. These were moderately correlated with joy (see Table 39 for correlation matrix). Attributions of locus, internal controllability and external controllability did not have a significant impact on joy. The residual scatterplots showed linear relationships between the variables, and homoscedasticity.

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$\beta$</th>
<th>sr</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability</td>
<td>-.156</td>
<td>.044</td>
<td>-.199</td>
<td>-.111</td>
<td>.012</td>
<td>-3.534</td>
<td>&lt; .001</td>
<td>.180</td>
</tr>
<tr>
<td>Involvement</td>
<td>-.208</td>
<td>.041</td>
<td>-.164</td>
<td>-.158</td>
<td>.025</td>
<td>-5.021</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td>-.101</td>
<td>.045</td>
<td>-.127</td>
<td>-.071</td>
<td>.005</td>
<td>-2.264</td>
<td>.024</td>
<td></td>
</tr>
</tbody>
</table>

(d) Hypothesized variables impacting sympathy.

The significant results of the regression analysis for the predictors of sympathy are shown in Table 50. This presents the coefficients, significance tests and explained variance in the dependent variable for the predictors in the regression analysis, $F(6, 827) = 27.549, p < .001$. Three variables contributed significantly to the prediction of sympathy: attribution of internal controllability, followed by responsibility, then accountability, all of which were moderately correlated with sympathy on the correlation matrix (see Table 39). Involvement and attributions of locus, and external controllability did not have a significant impact on sympathy. The residual scatterplots showed linear relationships between the variables, and homoscedasticity.

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$\beta$</th>
<th>sr</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribution of internal controllability</td>
<td>-.161</td>
<td>.054</td>
<td>-.156</td>
<td>-.095</td>
<td>.009</td>
<td>-2.992</td>
<td>.003</td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td>-.150</td>
<td>.058</td>
<td>-.146</td>
<td>-.082</td>
<td>.007</td>
<td>-2.592</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>-.126</td>
<td>.057</td>
<td>-.128</td>
<td>-.072</td>
<td>.005</td>
<td>-2.262</td>
<td>.024</td>
<td></td>
</tr>
</tbody>
</table>
(e) **Hypothesized variables impacting surprise.**

The significant results from the standard regression analysis for the predictors of surprise are shown in Table 51. This presents the coefficients, significance tests and explained variance in the dependent variable for the predictors in the regression analysis, $F(6, 828) = 13.879, p < .001$. Two variables contributed significantly to the prediction of surprise: responsibility, then involvement, although these accounted only for 9.1% of the variance. Attributions of locus, internal controllability and external controllability and accountability did not have a significant impact on surprise. All correlations with the predictor variables were $r < .3$ on the correlation matrix (see Table 39). The residual scatterplots showed linear relationships between the variables, and homoscedasticity.

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$\beta$</th>
<th>$sr$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>.186</td>
<td>.070</td>
<td>.157</td>
<td>.088</td>
<td>.007</td>
<td>2.667</td>
<td>.008</td>
<td>.091</td>
</tr>
<tr>
<td>Involvement</td>
<td>.261</td>
<td>.065</td>
<td>.139</td>
<td>.134</td>
<td>.018</td>
<td>4.032</td>
<td>&lt; .001</td>
<td></td>
</tr>
</tbody>
</table>

**Hypothesized Variables Impacting Behaviour**

Attributions of locus (internal/external), internal controllability and external controllability, responsibility, accountability, emotions (anger, fear, joy, surprise, sympathy) and attitude were predicted to impact behavioural intents of loyalty, complaining and disloyalty. Separate multiple regressions were run for all three dependent variables.

(a) **Impact on loyalty.**

A standard regression analysis was conducted in which all the variables were entered as predictors of loyalty. Table 52 presents the coefficients, significance tests and explained variance in the dependent variable for the predictors in the regression analysis, $F(11, 831) = 94.39, p < .001$. Attitude was loyalty’s strongest predictor, followed by joy, fear and anger. Attributions of locus, internal controllability and external controllability, responsibility, accountability, sympathy and surprise did not significantly impact loyalty. Attitude was substantially correlated with loyalty ($r = .64$) as was joy ($r = .65$), followed by fear ($r = .50$) and anger ($r = .42$) (see Table 39). The residual scatterplots showed linear relationships between the variables, and homoscedasticity.
Table 52 Simultaneous Regression Analysis showing significant predictors of loyalty

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>sr</th>
<th>sr²</th>
<th>t</th>
<th>p</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>.278</td>
<td>.025</td>
<td>.353</td>
<td>.255</td>
<td>.065</td>
<td>11.023</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Joy</td>
<td>.344</td>
<td>.031</td>
<td>.348</td>
<td>.258</td>
<td>.067</td>
<td>11.163</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td>-.119</td>
<td>.021</td>
<td>-.175</td>
<td>-.129</td>
<td>.017</td>
<td>-5.582</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>.055</td>
<td>.027</td>
<td>.081</td>
<td>.048</td>
<td>.002</td>
<td>2.063</td>
<td>.039</td>
<td>.555</td>
</tr>
</tbody>
</table>

(b) Impact on complaining.

A standard regression analysis was conducted using the predictor variables for complaining. Table 53 presents the coefficients, significance tests and explained variance in the dependent variable for the significant predictors in the regression analysis, $F(11, 831) = 36.54, p < .001$. Complaining was most strongly predicted by anger, followed by fear, and responsibility, attribution of locus and external controllability. Attitude, accountability, joy, sympathy, surprise and internal controllability did not have a significant impact on complaining. Anger was substantially correlated with complaining ($r = .55$), followed by fear ($r = .40$) - see Table 39. The residual scatterplots showed linear relationships between the variables, and homoscedasticity.

Table 53 Standard Regression Analysis of significant variables on complaining

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>sr</th>
<th>sr²</th>
<th>t</th>
<th>p</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>.464</td>
<td>.046</td>
<td>.494</td>
<td>.290</td>
<td>.084</td>
<td>10.168</td>
<td>&lt; .001</td>
<td>.326</td>
</tr>
<tr>
<td>Fear</td>
<td>.108</td>
<td>.036</td>
<td>.116</td>
<td>.086</td>
<td>.007</td>
<td>3.018</td>
<td>.003</td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td>.126</td>
<td>.057</td>
<td>.116</td>
<td>.063</td>
<td>.004</td>
<td>2.205</td>
<td>.028</td>
<td></td>
</tr>
<tr>
<td>Attribution of locus</td>
<td>.089</td>
<td>.041</td>
<td>.090</td>
<td>.062</td>
<td>.004</td>
<td>2.189</td>
<td>.029</td>
<td></td>
</tr>
<tr>
<td>Attribution of external controllability</td>
<td>.090</td>
<td>.034</td>
<td>.088</td>
<td>.039</td>
<td>.002</td>
<td>2.664</td>
<td>.008</td>
<td></td>
</tr>
</tbody>
</table>
(c) Impact on disloyalty (withdrawal of custom and negative word of mouth).

A standard regression analysis was conducted in which the variables were entered as predictors of disloyalty. Table 54 presents significant results for disloyalty in the regression analysis, $F(11, 831) = 122.48, p < .001$, showing the strongest predictor was fear, then anger, attitude, joy and the internal controllability attribution. Attributions of locus and external controllability, responsibility, accountability, sympathy and surprise did not significantly impact disloyalty. Fear, anger and joy were highly correlated with disloyalty ($r = .68$, $r = .66$, and $r = -.53$ respectively) - see Table 39. The residual scatterplots showed linear relationships between the variables, and homoscedasticity.

Table 54 Standard Regression Analysis of variables that significantly impacted disloyalty

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
<th>$sr$</th>
<th>$sr^2$</th>
<th>t</th>
<th>p</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear</td>
<td>.426</td>
<td>.034</td>
<td>.363</td>
<td>.268</td>
<td>.072</td>
<td>12.515</td>
<td>&lt; .001</td>
<td>.786</td>
</tr>
<tr>
<td>Anger</td>
<td>.328</td>
<td>.043</td>
<td>.276</td>
<td>.162</td>
<td>.026</td>
<td>7.558</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>-.324</td>
<td>.040</td>
<td>-.238</td>
<td>-.172</td>
<td>.030</td>
<td>-8.024</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Joy</td>
<td>-.128</td>
<td>.049</td>
<td>-.076</td>
<td>-.065</td>
<td>.004</td>
<td>-2.608</td>
<td>.009</td>
<td></td>
</tr>
<tr>
<td>Attribution of internal controllability</td>
<td>.119</td>
<td>.049</td>
<td>.086</td>
<td>.052</td>
<td>.003</td>
<td>2.427</td>
<td>.015</td>
<td></td>
</tr>
</tbody>
</table>

**Emotion Impacting Attitude**

The final standard regression examined the impact of emotions (anger, fear, surprise, sympathy and joy) on attitude. Table 55 presents the results for attitude, $F(5, 837) = 149.66, p < .001$. All emotions were significant predictors of positive attitude, with the strongest being joy followed by sympathy, then anger, surprise and fear. Joy, sympathy and anger were correlated with attitude ($r = .58$, $r = .54$, and $r = .51$, respectively, see Table 39). The residual scatterplots showed linear relationships between the variables, and homoscedasticity.

Table 55 Simultaneous Regression Analysis of emotions that significantly predicted attitude

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
<th>$sr$</th>
<th>$sr^2$</th>
<th>t</th>
<th>p</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joy</td>
<td>.385</td>
<td>.040</td>
<td>.305</td>
<td>.239</td>
<td>.057</td>
<td>9.530</td>
<td>&lt; .001</td>
<td>.472</td>
</tr>
<tr>
<td>Sympathy</td>
<td>.269</td>
<td>.030</td>
<td>.274</td>
<td>.228</td>
<td>.052</td>
<td>9.530</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>-.225</td>
<td>.033</td>
<td>-.258</td>
<td>-.172</td>
<td>.030</td>
<td>-6.844</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Surprise</td>
<td>.060</td>
<td>.026</td>
<td>.071</td>
<td>.058</td>
<td>.003</td>
<td>2.329</td>
<td>.020</td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td>-.057</td>
<td>.029</td>
<td>-.066</td>
<td>-.049</td>
<td>.002</td>
<td>-1.961</td>
<td>.050</td>
<td></td>
</tr>
</tbody>
</table>
Discussion

The results of the regression analyses indicated that a number of hypothesized variables predicted emotions, behavioural intent and attitude.

Emotions.

The five separate multiple regression analysis found that attributions (locus, internal controllability, external controllability), involvement, responsibility and accountability predicted emotions. Attributions did not significantly predict most emotions, despite predictions from attributional literature investigating emotions of anger and sympathy. Instead, responsibility, accountability and involvement were better predictors, with responsibility impacting all emotions, as did accountability (with the exception of surprise), and involvement (with the exception of sympathy). See Table 56 for significant results. This was the first time that the constructs of involvement and accountability were tested as predictors of emotions in crisis situations.

Hypothesis 10, predicting that attributions would impact emotions, was not supported for most emotions. Hypothesis 11, predicting that involvement would impact emotions, was supported for all emotions, except sympathy. Hypothesis 12a, that responsibility would impact all emotions was supported. Hypothesis 12d, that accountability would impact emotions, was mostly supported.

Table 56 Significant results for predicted IVs on emotions indicated with beta weights

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Locus</th>
<th>Internal control</th>
<th>External control</th>
<th>Involvement</th>
<th>Responsibility</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>–</td>
<td>.098</td>
<td>.060</td>
<td>.096</td>
<td>.403</td>
<td>.152</td>
</tr>
<tr>
<td>Fear</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>.235</td>
<td>.280</td>
<td>.169</td>
</tr>
<tr>
<td>Joy</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>-.164</td>
<td>-.127</td>
<td>-.199</td>
</tr>
<tr>
<td>Sympathy</td>
<td>–</td>
<td>-.156</td>
<td>–</td>
<td>-.146</td>
<td>-.128</td>
<td></td>
</tr>
<tr>
<td>Surprise</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>.134</td>
<td>.157</td>
<td>–</td>
</tr>
</tbody>
</table>

In sum, the higher the judged responsibility, accountability and involvement, and the higher the attribution of internal controllability and external controllability, the higher the anger. The higher the judged responsibility, involvement and accountability, the higher the fear and the lower the joy. The lower the level of attributed internal controllability,
responsibility and accountability, the higher the sympathy. The higher the responsibility and involvement, the higher the surprise.

Behavioural intent.

The multiple regression analysis found that attributions, responsibility, emotions of anger, fear and joy, and attitude significantly predicted behavioural intentions, although neither accountability, nor emotions of sympathy and surprise were significant for any behavioural intention. As can be seen from Table 57, anger and fear predicted all behavioural intentions, while joy and attitude predicted disloyalty and loyalty. The attributions of locus, external controllability and responsibility predicted complaining only. The attribution of internal controllability predicted disloyalty. For complaining, the higher the anger, fear, and responsibility and the stronger the attributions of locus and external controllability, the higher the complaining. For disloyalty, the stronger the fear and anger and the judgment of internal controllability, the higher was the disloyalty; lower joy and lowered attitude to the company also predicted higher disloyalty. For loyalty, the higher were the attitude and joy, the higher the loyalty; the lower were the fear and anger, the higher was the loyalty.

The finding that different emotions are the strongest driver of different consumer behavioural intents, rather than attributions, substantially adds to the literature, both in regards to consumer reactions to crisis, and to findings for emotions. While it makes intuitive sense that fear drives behaviour, neither fear nor joy had previously been tested in a crisis scenario.
<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Predictor variables</th>
<th>Locus</th>
<th>Internal control</th>
<th>External control</th>
<th>Responsibility</th>
<th>Accountability</th>
<th>Attitude</th>
<th>Anger</th>
<th>Fear</th>
<th>Surprise</th>
<th>Sympathy</th>
<th>Joy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disloyalty</td>
<td>–</td>
<td>.086</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>-.238</td>
<td>.276</td>
<td>.363</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>-.076</td>
</tr>
<tr>
<td>Loyalty</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>.353</td>
<td>.081</td>
<td>-.175</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>.348</td>
</tr>
<tr>
<td>Complain</td>
<td>.090</td>
<td>–</td>
<td>.088</td>
<td>.116</td>
<td>–</td>
<td>–</td>
<td>.494</td>
<td>.116</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Hypothesis 13, predicting that attributions would impact behavioural intentions, was not supported for most variables. Hypothesis 15a, predicting that responsibility would predict behavioural intentions, was supported only for complaining, while Hypothesis 15d, that accountability would predict behavioural intentions, was not supported. Instead, emotions (anger, fear, joy) and attitude were the main behavioural predictors. Therefore Hypothesis 14, predicting that emotion would impact behavioural intentions was partially supported, and Hypothesis 16 regarding attitude impacting behavioural intentions was supported.

**Attitude.**

The multiple regression analysis found that all emotions significantly predicted attitude, thus Hypothesis 18 was supported. While Jorgensen (1996) also found that emotion predicted attitude in a crisis scenario, this was the first time that emotions, other than anger and sympathy, have been studied for their impact on attitudes in crisis scenarios. For attitude, higher joy, sympathy and surprise predicted higher attitude to the company, while anger and fear led to lowered attitudes.

**Test 9: Impact of Demographic Variables on Emotions and Behaviour**

It had been hypothesized that demographic variables of income, age, education, gender, and culture would impact emotions and behavioural intent. Specifically, stronger negative reported emotions and negative behavioural intentions were predicted for those who had a lower income (Hypothesis 17a), who were younger (Hypothesis 17b), had a lower education level (Hypothesis 17c), were women (Hypothesis 17d), or who belonged to an individualist culture (Hypothesis 17f and Hypothesis 17g). In addition, culture was predicted to impact attributions (Hypothesis 17e). However, as a very small proportion of the sample (2%, n = 19), identified themselves as belonging to a culture from a country identified by Hofestede (2000) as collectivist, this variable was not testable in Study 3.

Demographic variables were included in the study to check whether they influenced emotions and behavioural intentions. For example, Weinberger and Romeo (1989) found that, following the Rely tampon toxic shock crisis, product sales declined most strongly in groups that were less educated, had lower income and were racially non-white/non-black. This applied both in the short and long term (five years later). Other researchers found gender differences, both in emotion ratings, and in behavioural expression, of emotion. For example, Knight et al. (1985) found that anger responses generally steadily declined with age for both men and women, which was particularly noticeable between younger and older age cohorts.
The intention had been to examine demographic variables as potential covariates. The purpose of using MANCOVA is to remove the effects of unwanted variables prior to evaluating the between-group effects, thereby reducing error and increasing the statistical power (Tabachnik & Fidell, 2001). However, MANCOVA assumes linear relationships between all pairs of covariates and all DV-covariate pairs of the tests, thus deviations from linearity reduce the power of the statistical tests (Tabachnik & Fidell, 2001). Due to the curvilinear relationships between the DV-covariate pairs, this was precluded. While a correlation matrix showed which demographic variables had significant correlations with emotions and behaviour at the .01 and .05 level, it could not show which of the demographic groupings produced the effect.

As a result, a factorial between-groups MANOVA investigated the impact of the four demographic variables on the eight dependent variables: emotions of anger, fear, surprise, joy and sympathy, and behavioural intentions of complaining, loyalty and disloyalty. As participant ages ranged from 18 to 95, groups of similar sizes were created (see Appendix 7.15.1 for the bar chart, with details of original groupings listed in Appendix 7.5). Due to the large numbers of participants in their 40s and 50s, I created groupings for those aged 18-30, 31-40, 41-48, 49-59 and 60-95. Education was also re-grouped, as groups of those with lowest and highest levels of education were smaller. As a result, participants whose maximum education level was primary school were added to those who were high school graduates; those who had completed a certificate/trade certificate were added to those who had completed a diploma/associate diploma; and those who had completed a degree were added to those who had completed a post-graduate degree (see Appendix 7.15.2 for the bar chart). For income, the small cell sizes for the three highest income groups ($75,000 to $99,000, $100,000 to $149,000 and $150,000+) meant a re-grouping of income into $75,000+. The group on $14,999 or less was over-represented (see Appendix 7.15.3 for the bar chart).

Results of MANOVA.

Box’s M test for homogeneity of variance was violated, although Tabachnik and Fidell (2001) indicated that this can be too strict with large samples. Bartlett’s Test of Sphericity, which assesses whether significant multivariate correlations exist, was significant ($p < .05$), therefore the assumption was not violated. All variables ($p < .001$) violated Levene’s test of equality of error variances, indicating that variability across groups differed. As the homogeneity of variances was violated, Pillai’s criterion was used (Hair et al., 1998). In the follow-up ANOVA, a more conservative alpha level of .01 was used to determine significance, rather than the conventional .05 level (Tabachnik & Fidell, 2001).
Results indicated significant a main effect for age, $F(32, 1752) = 1.944, p < .05$, Pillai’s trace = .104, income $F(32,2340) = 1.945, p < .05$, Pillai’s trace = .101, and gender $F(8, 435) = 2.136, p < .05$, Pillai’s trace = .038, but not for education. As well, there was one interaction between age, education and income, $F(296, 4712) = 1.516, p < .05$, Pillai’s trace = .542.

As there was a main effect for age, income and gender, and interaction effects for age, income and education, I investigated the significance of the tests of between-subjects effects, using a Bonferroni adjustment. With eight dependent variables, the alpha level was set to $p < .006 (.05/8)$ to reduce the chance of a Type 1 error. However, following the Bonferroni adjustment, only age showed significant results for emotions of anger, fear, joy, sympathy (but not surprise), and behavioural intention of disloyalty and loyalty (but not complaining). Thus, Hypothesis 17a for Income, Hypothesis 17c for Education and Hypothesis 17d for Gender was not supported, although Hypothesis 17b for Age was partly supported.

*Follow-up ANOVA for age using post-hoc testing.*

The importance of the impact of age on the significant DVs was calculated for the effect size statistic, eta squared. The mean and distributions for age were checked for each cell, with mean total ages ranging from 43 to 47, therefore the effect was not due to uneven distributions of age groups among cells.

Due to assumption violations, in the follow-up ANOVA to determine where the differences were for age impact, I used a more stringent alpha level of .01 to determine the variables’ significance, rather than the conventional .05 level (Tabachnik & Fidell, 2001). For age, significant differences had been predicted between the older and younger groups, with more negative emotions and behavioural intentions expected in the younger group and less negative emotions and behavioural intentions expected in the older group. As noted earlier, there were no statistically significant differences for age on surprise or complaining.

The highest anger was expected in the 18-30 group and the lowest in the 60-95 group. Although the ANOVA was significant for anger ($p = .025$), post-hoc comparisons using Tukey’s HSD indicated no significant difference in the means between the age groups with alpha set at .01, although at .025, there was a difference between two groups (see Table 58). The means plot (see Appendix 7.16.1) indicated anger increased from the 41-48 age group to peak at 49-59 before falling, as expected, to the lowest levels in the 60-95 age group.
The highest fear was expected in the 18-30 age group, and the lowest in the 60-95 age group. Post-hoc comparisons using Tukey’s HSD indicated that the mean difference was significant at the .01 level between the age groups of 60-95 and all other groups, and with the 31-40 age group at the .025 level (see Table 58). The highest fear was reported by the 41-48 age group (with similar levels reported by the 18-30, 31-40 and 49-59 age groups), with the lowest level, as predicted, in the 60-95 age group (see Appendix 7.16.2 for the means plot).

The lowest joy was expected in the 18-30 age group, with the highest in the 60-95 age group. Post-hoc comparisons using Tukey’s HSD indicated the mean difference was significant at the .01 level between the age groups of 60-95 and all groups except the 18-30 group (see Table 58). Similar low levels were reported in groups aged 31-40, 41-48 and 49-59, with higher joy for 18-30 age group and highest, as expected, in the 60-95 age group (see Appendix 7.16.3 for the means plot).

The lowest sympathy was expected in the 18-30 age group, with the highest in the 60-95 age group. Post-hoc comparisons using Tukey’s HSD indicated that the mean difference was significant at the .01 level between the age groups of 60-95 and all groups except the 18-30 age group (see Table 58). Instead, the lowest sympathy was reported by the 49-59 age group, with similar levels in the 31-40 and 41-48 age group, rising in the 18-30 age group, with highest, as expected, in the 60-95 age group (see Appendix 7.16.4 for the means plot).

The lowest loyalty was expected in the 18-30 age group, with the highest in the 60-95 age group. Post-hoc comparisons using Tukey’s HSD indicated that the mean difference was significant at the .01 level between the age groups of 60-95 and all groups (see Table 58). However, the lowest loyalty was reported in the 41-48 age group, with slightly higher levels reported by the 18-30, 31-40 and 49-59 age groups, with highest, as expected, for the 60-95 age group (see Appendix 7.16.5 for the means plot).

The highest disloyalty was expected in the 18-30 group, with the lowest in the 60-95 group. Post-hoc comparisons using Tukey’s HSD indicated that the mean difference was significant at the .01 level between the age groups of 60-95 and the 41-48 and 49-59 age groups (see Table 58). Highest disloyalty was reported in the 41-48 age group, and the lowest, as expected, in the 60-95 age group (see Appendix 7.16.6 for the means plot).
Table 58 Post-hoc testing using ANOVA showing sig. results for the Impact of Age on Emotions and Behaviour

<table>
<thead>
<tr>
<th>Age</th>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>$\eta^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30</td>
<td>Anger</td>
<td>4.39</td>
<td>1.66</td>
<td>4.39</td>
<td>1.68</td>
<td>4.45</td>
<td>1.75</td>
<td>4.62</td>
<td>1.86</td>
<td>4.00</td>
<td>.015</td>
<td>.012</td>
</tr>
<tr>
<td>31-40</td>
<td>Fear</td>
<td>4.89</td>
<td>1.63</td>
<td>4.82</td>
<td>1.77</td>
<td>4.99</td>
<td>1.74</td>
<td>4.88</td>
<td>1.92</td>
<td>4.22</td>
<td>.028</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>41-48</td>
<td>Joy</td>
<td>2.30</td>
<td>1.21</td>
<td>2.11</td>
<td>1.13</td>
<td>2.13</td>
<td>1.12</td>
<td>2.13</td>
<td>1.26</td>
<td>2.62</td>
<td>.024</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>49-59</td>
<td>Sympathy</td>
<td>3.28</td>
<td>1.51</td>
<td>3.07</td>
<td>1.50</td>
<td>3.11</td>
<td>1.48</td>
<td>3.02</td>
<td>1.57</td>
<td>3.70</td>
<td>.023</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>60-95</td>
<td>Disloyalty</td>
<td>4.15</td>
<td>1.91</td>
<td>4.15</td>
<td>2.04</td>
<td>4.29</td>
<td>2.16</td>
<td>4.21</td>
<td>2.22</td>
<td>3.40</td>
<td>.022</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Loyalty</td>
<td>2.19</td>
<td>1.13</td>
<td>2.19</td>
<td>1.10</td>
<td>2.03</td>
<td>1.09</td>
<td>2.18</td>
<td>1.24</td>
<td>2.76</td>
<td>.041</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

* indicates variable that is significantly different from \(^b\) variables at the $p < .01$ level;

* indicates variable that is significantly different from \(^c\) variables at the $p < .025$ level;

Interpretation.

The scenario used in the experiment (an airline crash) had been designed to remain as neutral as possible across different demographic variables.

Of the demographic variables, only age significantly impacted results. Hypothesis 17b,
which predicted more negative emotions and behavioural intents in the younger age group, and more positive emotions and behavioural intents in the older age group, was partly supported: the least reactive group to company crises was the 60 to 95 year age group. This group had significantly lower anger, fear and disloyalty and significantly higher joy, sympathy and loyalty compared with most other age groups. One possible explanation for this effect may be that this age group were less frequent consumers of air flights. Another explanation was provided in a review of emotional wellbeing studies by Charles, Reynolds, and Gatz (2001). These researchers noted that many studies reported that older adults had less anxiety, greater contentment, and a higher balance of positive to negative affect compared with their younger counterparts. The researchers also found age-related decreases in negative affect, and improvement in positive affect, from the younger, to the middle-aged and older adults. These results may explain Study 3’s findings regarding lower negative reactions and higher positive reactions for older adults.

Managerial implications for this variable at first glance seem to indicate that less recovery effort may need to be directed to this older group. However, considering that results were measured on a 7-point scale, negative emotions for both Crisis types were still relatively high in the 60 to 95 age group \((M = 4.00\) for anger, \(M = 4.21\) for fear), with positive emotions low \((M = 2.62\) for joy, and \(M = 3.70\) for sympathy). In addition, loyalty behaviour was still low \((M = 2.76)\), while disloyalty was around the mid-point \((M = 3.40)\).

Despite predictions, the higher age (60-95) and lower age (18-30) groups did not significantly differ from each other for emotions of anger, joy, sympathy and disloyalty, although they did for fear and loyalty. Of all groups, these two showed the least significant differences and the most similarities in reactions.

Reactions in the 31-40, 41-48 and 49-59 age groups did not vary significantly for fear, joy, sympathy, loyalty and disloyalty. However, the 49-59 age group reported highest anger, and lowest sympathy, while the 41-48 age group reported the highest fear and disloyalty, and the lowest loyalty. These findings appear in contrast with those of Charles et al. (2001) who reported a climb in positive affect and drop in negative affect with age. As the three middle age groupings (aged 31 to 59) appear to have stronger negative – and weaker positive – reactions to company crises, if a crisis affected consumers, the results may be more severe than for the youngest and oldest age cohorts.

**Test 10: Checking impact of Credibility and Accounts**
As the credibility of Accounts may have impacted results, it was decided to test Account credibility, a linear variable, in a MANCOVA as a covariate with Account on the hypothesised dependent variables. However, credibility failed MANCOVA’s required statistical tests. Credibility was therefore adjusted into a categorical variable, with results tested for high and low credibility, against Accounts in a MANOVA. The credibility scores ranged from 1 to 7, making the theoretical mean 4, with the top quartile (high credibility) ranging from 5.25 to 7 and the lowest quartile (low credibility) ranging from 1 to 2.75. There were 284 participants in the lowest quartile, and 153 participants in the highest quartile, for credibility.

Box’s M test was violated, as was Levene’s test for most of the dependent variables. There was an interaction between Credibility and Account, $F(44, 1680) = 2.591$, $p < .001$, Pillai’s trace = .254, partial $\eta^2 = .154$, a main effect for Account, $F(44, 1680) = 2.040$, $p < .001$, Pillai’s trace = .203, partial $\eta^2 = .051$, and a main effect for Credibility, $F(11, 417) = 6.895$, $p < .001$, Pillai’s trace = .154, partial $\eta^2 = .154$. Variables contributing most to the overall difference were investigated through results of tests of between-subjects effects using a post-hoc procedure. Because there were 11 dependent variables, the alpha level was set to .005. The results for the significant variables for the interaction and a main effect are shown in Table 59.
Table 59 Significant dependent variables following a MANOVA on Accounts and Credibility

<table>
<thead>
<tr>
<th>Variable</th>
<th>Account x Credibility</th>
<th>Account</th>
<th>Credibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
<td>$p$</td>
<td>Partial $\eta^2$</td>
</tr>
<tr>
<td>account</td>
<td>17.786</td>
<td>&lt; .001</td>
<td>.143</td>
</tr>
<tr>
<td>responsib</td>
<td>16.562</td>
<td>&lt; .001</td>
<td>.134</td>
</tr>
<tr>
<td>anger</td>
<td>8.416</td>
<td>&lt; .001</td>
<td>.073</td>
</tr>
<tr>
<td>fear</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>surprise</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>joy</td>
<td>4.349</td>
<td>.002</td>
<td>.039</td>
</tr>
<tr>
<td>sympathy</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>complain</td>
<td>4.032</td>
<td>.003</td>
<td>.036</td>
</tr>
<tr>
<td>disloyalty</td>
<td>4.989</td>
<td>.001</td>
<td>.045</td>
</tr>
<tr>
<td>loyalty</td>
<td>6.282</td>
<td>&lt; .001</td>
<td>.056</td>
</tr>
<tr>
<td>attitude</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Discussion.**

The interaction between Accounts and Credibility was significant for accountability, responsibility, anger, joy, complaining, disloyalty and loyalty. Effects were strongest for accountability and responsibility, followed by anger and loyalty. Credibility (high/low) strongly impacted all dependent variables except for surprise, demonstrating that it had a significant impact on results. However, Accounts had a weaker effect using this particular sample matched for high/low credibility than in the earlier test using the full sample, where Accounts impacted anger, sympathy, loyalty, disloyalty, attitude and responsibility.

Examination of the graph for the interaction effects (see Appendix 17.7.1) shows that for accountability, Accounts perceived as low in credibility generally resulted in higher accountability, while Accounts perceived as highly credible resulted in lower accountability, although the effect for “justification” was minimal. The effect was opposite for “confession”. A “confession” perceived to have low credibility resulted in lower judged accountability than did the “confession” perceived to be highly credible. The lowest judged accountability was for a highly credible “denial”, while the highest judged accountability was for a low credibility “denial”.
Accounts perceived as low in credibility generally resulted in higher judged responsibility, while Accounts perceived as highly credible resulted in lower judged responsibility (see Appendix 17.7.2). The effect was opposite for “confession”. A “confession” perceived to have low credibility resulted in lower judged responsibility than did the “confession” perceived to be highly credible. The lowest judged responsibility was for a highly credible “denial”, while the highest judged responsibility was for a low credibility “denial”.

Accounts perceived as low in credibility generally resulted in higher anger, while Accounts perceived as highly credible resulted in lower anger (see Appendix 17.7.3). The effect was opposite for “confession”. A “confession” perceived to have low credibility resulted in lower anger than did the “confession” perceived to be highly credible. The lowest anger was for a highly credible “no comment”, while the highest anger was for a low credibility “denial”.

Accounts perceived as low in credibility generally resulted in lower joy, while Accounts perceived as highly credible resulted in higher joy (see Appendix 17.7.4). The effect was opposite for “confession”. A “confession” perceived to have low credibility resulted in higher joy, while the “confession” perceived to be highly credible resulted in lower joy. The highest joy was for a low credibility “confession”, while the lowest joy was for a low credibility “denial”.

Accounts perceived as low in credibility generally resulted in lower loyalty, while Accounts perceived as highly credible resulted in higher loyalty, although the effect for “justification” was minimal (see Appendix 17.7.5). The effect was opposite for “confession”. A “confession” perceived to have low credibility resulted in higher loyalty than did the “confession” perceived to be highly credible. The highest loyalty was for a highly credible “denial” while the lowest loyalty was for a low credibility “denial”.

Accounts perceived as low in credibility generally resulted in higher disloyalty, while Accounts perceived as highly credible resulted in lower disloyalty (see Appendix 17.7.6). The effect was opposite for “confession”. A “confession” perceived to have low credibility resulted in lower disloyalty than did the “confession” perceived to be highly credible. The lowest disloyalty was for a highly credible “no comment”, while the highest disloyalty was for a low credibility “denial”, although the results were almost identical for “no comment” and “excuse”.

Accounts perceived as low in credibility generally resulted in higher complaining, while Accounts perceived as highly credible resulted in lower complaining, although the effect for “justification” was virtually identical (see Appendix 17.7.7). The effect was opposite for “confession”. A “confession” perceived to have low credibility resulted in lower complaining than did the “confession” perceived to be highly credible. The lowest complaining was for a highly credible “no comment”, closely followed by “denial”, while the highest disloyalty was for a low credible “excuse”.

**Interpretation.**

A “confession” had the opposite effect to most other Accounts. A “confession” perceived to be low in credibility resulted in lower judged accountability, responsibility, anger, disloyalty and complaining, and higher joy and loyalty than did the high credibility “confession”. Overall, the most negative effects were for a low credibility “denial” or “excuse”, with the best results for a high credibility “denial” or “no comment”, or a low credibility “confession”.

These results for “confession” are consistent with findings from Weiner et al. (1991) who found that confession consisting of an admission of guilt accompanied by contrition, responsibility acceptance and/or reparation resulted in a lower responsibility ascription and higher forgiveness than did accounts of denial or silence. Weiner et al. (1991) suggested that confession alters perceptions of the confessor’s moral character. The researchers proposed that confession may be most advantageous when the giver is perceived as having done something wrong. In contrast, my results show that participants were less forgiving when the “confession” was viewed as being a credible response, and the most forgiving when the “confession” was perceived as not credible. “Confession” consisted of accepting responsibility, apologising, an expression of remorse, restitution and promise of future improved conduct. Thus when “confession” was considered not believable, that it was an inappropriate response, participants viewed the company more positively than for a believable “confession”. In sum, an unbelievable “confession” resulted in lower judged accountability, responsibility, anger, disloyalty and complaining and higher joy and loyalty than did a highly credible “confession”. 
Summary of Results

There were no significant interactions between the different Crisis types, Account and Harm level, but there were main effects for Crisis types and Accounts, but not for Harm. This meant that the prediction regarding a managerial flow chart for best Account selection in various Crisis types was not supported.

Crisis Types

As predicted, the two different Crisis types had significant a main effect for most emotions (Hypothesis 6), behaviour (Hypothesis 7), attitude (Hypothesis 8), attributions (locus, internal controllability, external controllability), responsibility and accountability but not involvement (Hypothesis 9) – see Table 59. Thus Hypotheses 6, 7, 8 and 9 were mostly supported.
<table>
<thead>
<tr>
<th>Factor: Crisis types</th>
<th>Significant results</th>
</tr>
</thead>
</table>
| Locus - Internal    | Anger, fear, disloyalty, responsibility and accountability significantly higher in an internal crisis  
Joy, loyalty and attitude significantly lower in an internal crisis  
Attribution of internal controllability higher, and attribution of locus, and external controllability lower in an internal crisis  
No significant effects for surprise, sympathy, complaining, or involvement in an internal crisis |
| Locus - External    | Anger, fear, disloyalty, responsibility and accountability significantly lower in an external crisis  
Joy, loyalty and attitude significantly higher in an external crisis  
Attribution of locus and external controllability higher and attribution of internal controllability lower in an external crisis  
No significant effects for surprise, sympathy, complaining, or involvement in an external crisis |
| Controllability-Controllable | Anger, fear, complaining, disloyalty, accountability and responsibility significantly higher in a controllable crisis  
Joy, sympathy, loyalty and attitude lower in a controllable crisis  
Attribution of internal controllability higher, and attribution of external controllability and locus lower, in a controllable crisis  
No significant effects for surprise, or involvement in a controllable crisis |
| Controllability-Uncontrollable | Anger, fear, complaining, disloyalty, accountability and responsibility significantly lower in an uncontrollable crisis  
Joy, sympathy, loyalty and attitude significantly higher in an uncontrollable crisis  
Attribution of external controllability and locus higher and internal controllability lower in an uncontrollable crisis  
No significant effects for surprise, or involvement in an uncontrollable crisis |
**Account**

While it had been posited that there was a hierarchy of Accounts ranging from “no comment”, “denial”, “excuse”, “justification” and “confession”, this was not supported. While “confession” fared best of all, similarly better consumer outcomes were found for “no comment”, while similarly poor consumer outcomes were found for “denial”, “excuse” and “justification” – see Table 60. While not significant, “no comment” and “confession” resulted in the lowest judged responsibility, while “no comment” resulted in lowest accountability.

<table>
<thead>
<tr>
<th>Account</th>
<th>Significant results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confession and no comment</td>
<td>Resulted in significantly less anger than did denial, excuse and justification. Moderate effect size.</td>
</tr>
<tr>
<td>Confession</td>
<td>Resulted in significantly higher sympathy than did denial, excuse and justification. Small to moderate effect size.</td>
</tr>
<tr>
<td>Confession</td>
<td>Resulted in significantly lower disloyalty than did excuse. Small effect size.</td>
</tr>
<tr>
<td>Confession</td>
<td>Resulted in significantly higher loyalty than did denial, excuse and justification.</td>
</tr>
<tr>
<td>Confession</td>
<td>Resulted in significantly higher attitude than did no comment, denial, excuse and justification. Moderate effect size.</td>
</tr>
</tbody>
</table>

Hypothesis 2 regarding Account’s impact on emotions was supported only for “confession”. Hypothesis 3 regarding Account’s impact on behavioural intentions was supported only for “confession”. Hypothesis 4 regarding Account’s impact on attitude was supported.

**Harm**

Harm had no main or interaction effects, congruent with the findings of Kaman Lee (2004), who also reported no main and interaction effects for Harm, Account and Crisis types. Using 7-point scales, I compared high Harm with 33 dead ($M = 5.62$, $SD = 1.52$) and low Harm with 33 slightly injured ($M = 4.86$, $SD = 1.98$) while Kaman Lee (2004) tested High Severity with 200 injured, some seriously ($M = 5.82$) and Extreme Severity with 300 dead ($M = 6.13$). This indicated that the comparatively low number of deaths in my scenarios was not the cause for the lack of effects for Harm.
Predictor Variables

It had been predicted that emotions would be impacted by attributions (Hypothesis 10), involvement (Hypothesis 11), responsibility and accountability (Hypothesis 12); that behaviour would be impacted by attributions, responsibility and accountability (Hypothesis 15); and that attitude would be impacted by emotions (Hypothesis 18).

For the impact of variables on emotions, there were significant results for all emotions except surprise; there were significant results for all behavioural intents; and all emotions significantly predicted attitude – see Table 61 for results.

Table 61 Variables that showed significant impacts on dependent variables

<table>
<thead>
<tr>
<th>Predictor variables that produced significant findings in order of significance (- indicates a negative relationship)</th>
<th>DV</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Responsibility, accountability, involvement, attribution of internal controllability, -attribution of external controllability (-ve)</td>
<td>Anger</td>
</tr>
<tr>
<td>• Responsibility, involvement, accountability</td>
<td>Fear</td>
</tr>
<tr>
<td>• -Accountability (-ve), -involvement (-ve), -responsibility (-ve)</td>
<td>Joy</td>
</tr>
<tr>
<td>• -Attribution of internal controllability (-ve), -responsibility (-ve), -accountability (-ve)</td>
<td>Sympathy</td>
</tr>
<tr>
<td>• Fear, anger, -attitude (-ve), -joy (-ve), -attribution of internal controllability (-ve)</td>
<td>Disloyalty</td>
</tr>
<tr>
<td>• Attitude, joy, -fear (-ve), -anger (-ve)</td>
<td>Loyalty</td>
</tr>
<tr>
<td>• Anger, internal attribution, -external controllability (-ve), fear</td>
<td>Complaining</td>
</tr>
<tr>
<td>• Anger, fear, joy, surprise, sympathy</td>
<td>Attitude</td>
</tr>
</tbody>
</table>

Demographic Variables

Results for almost all demographic variables was not supported. Only age had an impact, with the older age group consistently found to react significantly differently from other age groups.

Issues of Validity, Reliability and Rigour

By using a general population sample selected from the electoral roll, then using a random and systematic sampling design, the external validity and generalisability of the results was optimised. In addition, the respondents were randomly assigned to different treatment groups, disrupting potential relationships between the respondents and variables.
Extra internal control was gained in several ways. First there was systematic variation of the variables believed to cause a particular effect via use of the factorial design. Instrumentation problems were reduced by using one questionnaire only to test the dependent variables.

Construct measures had previously been tested and adjusted during Study 2. The exploratory factor analyses (EFA) and confirmatory factor analyses (CFA) showed that the measures had discriminant validity when tested against dissimilar constructs and convergent validity when measured with items on the same construct (Zikmund, 1997). Items that failed this assessment were removed. Scales showed good internal consistency. The emotion scales, tested for the first time in Study 2 and refined during Study 3, showed reliabilities ranging from .83 to .93. The behavioural intention scales, compiled from various measures, showed reliabilities ranging from .89 to .94. The adjusted involvement and attitude scales had reliabilities of .91 and .93, respectively. For the attribution scales, an established scale measuring attributions of locus, internal controllability and external controllability, the internal consistency ranged from .68 to .83. The established responsibility scale had a reliability of .78.

As a quasi-control to delineate the effects of demand characteristics, respondents were questioned as to what they perceived the study to be about and what they thought the researcher hoped to find. The final question meant that if respondents detected the experimental hypothesis and responded in a congruent manner then they were eliminated from the study. No participants were removed from the study for this reason.

Realism of the scenario was also checked via two questions. Participants thought that the scenarios were realistic ($M = 5.62, SD = 1.45$) and could easily imagine that this situation could happen to them or those close to them ($M = 5.34, SD = 1.64$), both means increasing from those using the same questions in Study 2.

Limitations

In Study 3, the very nature of the experimental design captured a static process that may not reflect the dynamic processes that take place in the external environment during a crisis. As such, generalisability to an actual crisis may be limited. However, the experimental method is useful for testing causal relationships based on theory.
In addition, there may have been a non-response bias. As Alreck and Settle (1985) indicated, a relatively low response rate was the single most serious limitation to direct mail data as it creates a non-response bias. However, my response rate of 20% was considered good.

The very nature of the variables of interest in this study may have created some weaker statistical effects than if other variables had been chosen. As Tabachnik and Fidell (2001) contend, even moderately correlated DVs diminish the power of a MANOVA (Tabachnik & Fidell, 2001). Instead, MANOVA works best with variables that are less highly correlated, and negatively correlated (Hair et al., 1998), reducing the IV’s predictive power (Hair et al., 1998). However, these constraints were determined by the nature of the variables of interest here.
CHAPTER 8 - DISCUSSION

Chapter Outline

This chapter discusses research findings from Studies 1, 2 and 3. First, I consider the hypotheses in the light of the results, identify the items of note from all three studies, and discuss how these relate to findings from other studies as well as possible reasons for any discrepancies. Next, I identify theoretical implications and the contribution to knowledge stemming from the analyses. Following this, I discuss managerial implications arising from the findings. Limitations of the research are also discussed and I explore future research directions.

Summary of Findings for All Tests

*Independent Variables: Crisis types, Account and Harm and Interaction Effects*

One of the tenets of this thesis was that different Accounts would perform either better or worse, depending on the two different Crisis types of Locus and Controllability, and, from Study 3, dependent upon the severity of Harm. However, this did not occur. In Study 2, there were no significant interactions (either two- or three-way) between the two Crisis types and Account, while Study 3 demonstrated that there were no significant interactions (either two-, three- or four-way) between the two Crisis types, Account and severity of Harm. Thus, Hypothesis 1, predicting an interaction between all IVs on the hypothesised DVs, was not supported. This finding was congruent Kaman Lee’s (2004) results from an experiment using airline crash scenarios testing the impact of three independent variables – Crisis type, Account and Harm. Kaman Lee (2004) found no two- or three-way interactions between Crisis types (internal/controllable, external/uncontrollable), Account and severity of Harm using a MANOVA with four dependent variables. In addition, Weiner et al.’s (1991) interpersonal study also found no interaction effects when testing independent variables of Account (denial, confession) in three causal conditions (internal/controllable, external/controllable, and ambiguous) on affect and behavioural intent. The lack of interaction effects in my study meant that the predicted managerial decision flow chart, aimed to assist managers with selection of Accounts based on Crisis types, was not supported.

There were also no significant interactions between Accounts and Crisis types, although results were mostly in the predicted direction, except for the “no comment”
response, which performed next best after “confession”. For further discussion, see “Managerial implications” later in this chapter.

There was a main effect for Crisis types and Accounts, but not for Harm, again, consistent with Kaman Lee’s (2004) findings.

Impact of Accounts on Hypothesised Dependent Variables

Accounts (no comment, denial, excuse, justification, confession) had been predicted to impact emotions (Hypothesis 2), behavioural intentions (Hypothesis 3), attitude (Hypothesis 4), judgments of responsibility and accountability, and attributions of foreseeability and intentionality (Hypothesis 5).

In Study 2’s Pilot 1, Accounts failed to have a main effect. I attributed this mainly to primacy effects and to the failure of the operationalisation of Accounts. Adjustments to the different Accounts were made accordingly, and manipulation checks inserted. Results from later Pilots indicated that participants differentiated between Accounts.

Study 3 demonstrated that Accounts significantly impacted attitudes, emotions, behavioural intentions and judgments. Specifically, as Accounts impacted attitude, Hypothesis 4 was supported. Accounts impacted anger and sympathy, therefore Hypothesis 2 was partly supported. Accounts impacted behavioural intents of disloyalty and loyalty, therefore Hypothesis 3 was partly supported. Accounts also impacted judgments of responsibility and accountability.

Attributions of intentionality and foreseeability had been discarded from further analysis in Study 2 as both constructs had extremely low communalities, and neither loaded on any factor in the post-hoc factor analysis with other attributions and attribution-like items. These constructs had not previously been empirically tested in a crisis scenario, although both intentionality and foreseeability (posited by Heider, 1958) had been used in the legal domain as two of the major determinants of responsibility (Hamilton & Sanders, 1992). Weiner raised several criticisms of using intentionality as a dimension (Kent & Martinko, 1995), arguing that it failed to achieve the theoretical and empirical support of his three dimensions of locus, controllability and stability (Hewstone, 1989). Foreseeability appears to be little tested, although Mowen and Ellis’ (1981) product defect study found that the defect was perceived as more foreseeable with an unknown company.
“Confession” performed the best of all Accounts, resulting in significantly lower anger and disloyalty, and significantly higher sympathy, loyalty and attitude than most other Accounts.

Responsibility judgments were lowest when either the Account of “confession” or “no comment” was provided. The finding for “confession” was congruent with Weiner et al. (1991) who found that an admission of responsibility (as given in a confession) lowered responsibility judgments. However, the finding was not congruent with Jorgensen (1996), whose structural equation model found no path between Account and responsibility.

A hierarchy of Account effects had been predicted (see Table 62), with most positive consumer effects expected for “confession”, and most negative effects for “no comment”. Instead, “confession” was generally followed by “no comment”, with “denial”, “excuse” and “justification” each receiving similarly poor results (see Table 62). These results mostly followed the credibility rating for each Account.

<table>
<thead>
<tr>
<th>Consumer outcome</th>
<th>Hypothesised best effects</th>
<th>Actual results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best</td>
<td>Confession</td>
<td>Confession</td>
</tr>
<tr>
<td></td>
<td>Justification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excuse</td>
<td>No Comment</td>
</tr>
<tr>
<td></td>
<td>Denial</td>
<td></td>
</tr>
<tr>
<td>Worst</td>
<td>No Comment</td>
<td>Denial, Excuse, Justification</td>
</tr>
</tbody>
</table>

The account of “no comment” was not expected to produce a positive consumer outcome, as interpersonal studies by Weiner et al. (1991) had shown that silence was not successful. A negative publicity study by Griffin et al. (1991) had also shown that silence resulted in lowered attitudes towards the firm. In addition, a poll (reported in Chapter 2) by U.S. public relations company Porter/Novelli found that nearly two-thirds of the 1,000 members of the public surveyed about company use of a “no comment” response felt that it almost always meant that the organisation was guilty of wrong-doing (Wilcox et al., 1995).

Yet both my Study 3 and Kaman Lee’s (2004) crisis study using plane crash scenarios and a sample from a collectivist (Hong Kong) culture found that “no comment” performed better than predicted. Kaman Lee’s “no comment” performed significantly better than did her “justification” account of “minimization” in engendering responsibility and trust. Kaman Lee
(2004) attributed her findings to cultural differences, contending that the Chinese value of
keeping silent had some counter effects on negative judgments. It is now evidenced that the
positive “no comment” finding may be pan-cultural. I suggest that the positive finding for the
“no comment” response may be that judgment is withheld until a response that specifically
addresses the issue of responsibility for the crisis is received. This is congruent with Hamilton
and Sanders (1992) claim that we usually do not know whether or how much to blame
someone for an act of wrong-doing, until we hear their answer.

My Study 3 showed similar results for the three Accounts of “justification”, “denial”
and “excuse”. The inconsistent findings on the two Account manipulation checks indicated
that Study 3 participants may have had difficulty differentiating between the these Accounts.
As Study 2 participants successfully discriminated between these Accounts, problems may
have resulted from differing education levels between the two groups. It may also be due to
the problematic nature of the constructs and difficulty in their operationalisation in a survey-
type instrument. However, Kaman Lee (2004) also found similarly poor (but non-significant)
results for both “minimisation” (justification) and “blame-shifting” (excuse), indicating that
respondents may perceive these two Accounts as similar.

Another explanation is that results may be partially attributed to differences in
perceived credibility of the different Accounts. As noted in Chapter 7, the overall mean scores
for Accounts indicated that “confession” was the most credible account, followed by “no
comment”, then “excuse”, “denial” and “justification”. In addition, a further testing of
Account against Account credibility (high/low) in a MANOVA against hypothesised
dependent variables found interaction effects between Account and Credibility. Specifically,
Accounts of “no comment”, “denial”, “excuse” and “justification” perceived to be highly
credible resulted in higher judged accountability, responsibility, anger, disloyalty and
complaining and lower joy and loyalty. However, the low credibility “justification” had only
marginally different results for accountability and responsibility. In contrast, “confession” had
the opposite effect to most other Accounts. “Confession”, when perceived to be a highly
credible response, resulted in higher judged accountability and responsibility, higher anger,
disloyalty and complaining, and lower joy and loyalty, than did the low credibility
“confession”.

Impact of Crisis types on Hypothesised Dependent Variables

Crisis types of Locus (internal, external) and Controllability (controllable, ambiguous,
uncontrollable) had been predicted to have both interaction and a main effect on dependent
variables of emotions (Hypothesis 6), behaviour (Hypothesis 7), attitude (Hypothesis 8), responsibility, accountability, and attributions of locus, internal controllability, external controllability, foreseeability and intentionality (Hypothesis 9).

Stronger negative consumer reactions had been predicted for an ambiguous Crisis type. This prediction followed results from Jorgensen’s (1994) crisis study, which found highest anger and lowest behavioural intent with an ambiguous crisis, compared with an internal controllable and an external uncontrollable crisis. In addition, Weiner et al.’s (1991) interpersonal study found the highest anger in the ambiguous causal condition compared with the internal controllable and external uncontrollable conditions. These researchers operationalised the ambiguous Crisis type as a combination of the internal controllable crisis cause and the external uncontrollable crisis cause. In my study, the ambiguous Crisis type was operationalised as falling mid-way on the Controllability (controllable/uncontrollable) scale, with an internal ambiguous and an external ambiguous crisis tested. However, as Study 2 participants did not discriminate between ambiguous and uncontrollable crises, the ambiguous Crisis type was removed from further analysis.

Study 2 and Study 3 both showed no interaction effects between Crisis types of Locus and Controllability, only a main effect. However, interaction effects between crisis types had never before been tested, to this researcher’s knowledge. Instead, previous researchers had investigated either internal controllable, external uncontrollable or ambiguous crises. Results for a main effect of Crisis types on the dependent variables in Study 2 were replicated in Study 3, providing evidence for the robustness of the studies across samples, except that Study 3 showed that Crisis types impacted a wider range of variables (see Table 63). This indicates that, when a crisis impacts a broader population sample, rather than a younger demographic group, a wider variety of reactions may be expected.

In Study 2 as noted earlier, constructs of foreseeability and intentionality were removed from further analysis.
### Table 63 Significant results for impact of Crisis types on DVs across samples

<table>
<thead>
<tr>
<th>Crisis type</th>
<th>Study 2 (student sample)</th>
<th>Study 3 (general population sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attribution: locus</td>
<td>Attribution: locus</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
<td>Accountability</td>
</tr>
<tr>
<td></td>
<td>Responsibility</td>
<td>Responsibility</td>
</tr>
<tr>
<td></td>
<td>Attribution: internal controllability</td>
<td>Attribution: internal controllability</td>
</tr>
<tr>
<td></td>
<td>Anger</td>
<td>Anger</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loyalty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disloyalty</td>
</tr>
<tr>
<td>Locus (internal, external)</td>
<td>Attribution of internal controllability</td>
<td>Attribution of external controllability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attribution: locus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accountability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Responsibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anger</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loyalty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disloyalty</td>
</tr>
<tr>
<td></td>
<td>Responsibility</td>
<td>Responsibility</td>
</tr>
<tr>
<td></td>
<td>Anger</td>
<td>Sympathy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loyalty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disloyalty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complaining</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attitude</td>
</tr>
</tbody>
</table>

In Study 2 and Study 3, both Locus and Controllability Crisis types had the strongest impact on attributions. This was expected as attributions also acted as a manipulation check to ensure that crises were perceived in the intended way. The next strongest effects for both Crisis types were for accountability, followed by responsibility.

In Study 2, the significant results showed that, for the Locus crisis, when it was internal, participants held the company more accountable and responsible, and were more angry than in the case of an external crisis. For the Controllability (controllable, uncontrollable) crisis, when it was controllable, the company was perceived as more responsible and received less sympathy than in the case of the uncontrollable or ambiguous crises.
In Study 3, the significant results showed that, for the Locus crisis, when it was internal, participants held the company more accountable and responsible, and were more angry, fearful, and disloyal than in the case of an external crisis. For the external crisis, participants reported more joy, loyalty and had a better attitude than than in the case of an internal crisis. For the Controllability crisis, when it was controllable, participants perceived the company as more responsible and accountable, and directed more anger, disloyalty and complaining intentions at the company than for an uncontrollable crisis. For the uncontrollable crisis, participants reported more joy, sympathy and loyalty, and had a better attitude than for the controllable crisis.

Although Jorgensen (1996) and Kaman Lee (2004) tested a smaller number of dependent variables and two Crisis types (internal controllable, external uncontrollable), my results are consistent with their findings of worse consumer outcomes for the internal controllable crisis and better for the external uncontrollable condition. In addition, my finding that Crisis type had a stronger impact on consumer reactions than did Account is consistent with Jorgensen (1996). In addition, each condition in the two Crisis types (either internal or external, and controllable or uncontrollable), resulted in different consumer outcomes, providing companies with likely consumer outcomes in the four different crisis conditions.

In sum, results were partially supported for the predicted impact of Crisis type on emotions (Hypothesis 6), behaviour (Hypothesis 7), attitude (Hypothesis 8), as well as judgments of responsibility, and accountability, involvement and attributions of locus, internal controllability, external controllability, foreseeability and intentionality (Hypothesis 9).

**Harm Level on Predicted Dependent Variables**

To explain the lack of predicted effect for Account in Study 2, Hypothesis 19 was created, predicting that Harm levels (33 slightly injured versus 33 killed) would influence all DVs: involvement, attributions (locus, internal controllability, external controllability), responsibility, accountability, emotions and attitude. As noted earlier, no interaction effects had been found between Harm level, Crisis types and Account, indicating Hypothesis 1 was not supported. In addition, in Study 3, no main effect was found, thus Hypothesis 19 was not supported.
This finding was in contrast with those from Mowen and Ellis’ (1981) study (noted in Chapter 2), which found that degree of injury (minor burns versus two deaths) from a faulty coffee pot impacted purchase intent and company perceptions. However, my findings were consistent with those of Kaman Lee (2004) who found no main effect for Harm severity (200 injured versus 300 killed) in an airline crash scenario, and no interaction effects with Account or Crisis types.

One possible explanation for the lack of effect for Harm was garnered from various comments volunteered by participants at the end of the Study 3 questionnaire. In the words of one participant, “even one death is too many”, indicating that participants placed a premium on the value of human lives. As Study 3 found strong effects for responsibility and accountability, these variables predicted consumer reactions better than did Harm.

*Predicted Impact of Variables on Emotions*

A number of variables were predicted to impact emotions of anger, fear, joy, surprise, love and sadness. Specifically, it was predicted that attributions of locus, internal controllability and external controllability (Hypothesis 10), involvement (Hypothesis 11), judgments of responsibility and accountability, and attributions of foreseeability and intentionality (Hypothesis 12) would impact emotions.

In Study 2, the emotion of love was removed from further analysis as love items loaded in the exploratory factor analysis with other emotions, while sadness was renamed sympathy to more accurately reflect the items grouped under this construct.

Although the attribution of internal controllability predicted anger and sympathy, while the attribution of external controllability predicted anger, there were no effects for the locus attribution. Attribution of internal controllability was the strongest predictor (-ve) of sympathy. Thus Hypothesis 10 was only partly supported.

In Study 3, involvement was found to be a significant predictor of anger, fear and joy. Thus Hypothesis 11 was mostly supported.

Responsibility proved to be the strongest predictor of emotions, impacting all emotions (anger, fear, joy, sympathy, surprise). Of all the predictor variables, responsibility showed the strongest effect for emotions of anger, fear, and surprise. Accountability predicted all emotions, except surprise, and was the strongest predictor of joy. As intentionality and
foreseeability had been removed in Study 2, Hypothesis 12 was partly supported for responsibility and accountability.

*Predicted Impact of Variables on Behaviour*

It had been predicted that attributions of locus, internal controllability and external controllability (Hypothesis 13), emotions (Hypothesis 14), judgments of responsibility and accountability, attributions of foreseeability and intentionality (Hypothesis 15) and attitude (Hypothesis 16) would impact behavioural intentions.

From the Study 1 focus group research, a number of behaviours had been hypothesised: word-of-mouth behaviour, complaining, loyalty, switching, contagion and information-seeking. In Study 2, this had been reduced to four behaviours: word-of-mouth, complaining, loyalty, and withdrawal of custom (renamed from switching). In Study 3, negative word-of-mouth items loaded with withdrawal of custom items (with scales perfectly correlated in the CFA), and positive word-of-mouth items loaded with loyalty, as they had done in Study 2. Thus in Study 3, the scale devolved to three behavioural intents: loyalty, complaining and disloyalty (a renaming of the negative word-of-mouth and withdrawal of custom items).

Attributions of locus and external controllability predicted complaining behaviour, while the attribution of internal controllability predicted disloyalty. No attributions predicted loyalty. Thus, Hypothesis 13 was partly supported.

Anger, fear and joy were significant predictors of loyalty and disloyalty, and anger and fear also significantly predicted complaining, thus Hypothesis 14 was partly supported.

As responsibility predicted complaining only, and accountability did not predict any behavioural intents, Hypothesis 15 was mostly not supported.

Attitude predicted loyalty and disloyalty behavioural intentions, but not complaining, thus Hypothesis 16 was mostly supported. Previous studies on organisational crises had been unable to find a significant relationship between attitudes and purchase intentions or investment intentions. Jorgensen’s (1996) SEM model found no link between attitude and purchase intentions, while Griffin et al. (1991) investigated the covariance of attitude and purchase intentions, finding attitudes to be a dead-end variable.
Weiss and Cropanzano’s Affect Events Theory distinguished between attitude-driven behaviour and affect-driven behaviour. Although anger and fear drove complaining behaviour, both attitude and emotions of fear, anger and joy predicted disloyalty and loyalty behaviour. Therefore, AET’s distinction between affect-driven and judgment-driven behaviour was not supported when applied to company crisis scenarios.

Variables of Mood, Negative Affectivity, Age, Gender, Education and Income, Culture Impacting Emotions, Behaviour and Attributions.

A number of variables - income, age, education, gender, culture, mood and negative affectivity - were predicted to impact other dependent variables. Specifically, Income (Hypothesis 17a), Age (Hypothesis 17b), Education (Hypothesis 17c) and Gender (Hypothesis 17d) were predicted to impact emotions and behaviour. Participants belonging to collectivist cultures were expected to report more external attributions (Hypothesis 17e), lower negative emotions (Hypothesis 17f) and lower negative behavioural intentions (Hypothesis 17g) than were those belonging to individualist cultures. Negative Affectivity (Hypothesis 17h) and Mood (Hypotheses 17i, 17j) were predicted to impact emotions.

In the Study 1 focus groups, although no hypothesis testing could be carried out, no marked differences were noted for gender, income, education and culture, although an age bias appeared. The highest age group (60+) reported no boycott or avoidance behaviour, in contrast with the lowest age group (under 25), which reported both activities.

Study 2 and demographic variables.

In Study 2, due to the homogeneous student sample, income levels, age and education showed little variability, thus Hypotheses 17a, 17b and 17c respectively could not be examined. Only gender, culture, Negative Affectivity (NA), Positive Affectivity (PA) and mood were tested.

Hypothesis 17d predicted that Gender would impact emotions and behavioural intents, with women reporting higher levels of negative emotions and negative behavioural intentions than men. However, in the student population sample, this did not occur. Hypothesis 17d was therefore not supported.

Culture was predicted to impact attributions (Hypothesis 17e), emotions (Hypothesis 17f) and behaviour (Hypothesis 17g). However, culture impacted only the behaviour of complaining, with participants belonging to collectivist cultures more likely to complain than
those belonging to individualist cultures. Thus Hypotheses 17e and 17f were not supported, while Hypothesis 17g was partially supported. The finding for Hypothesis 17g was contrary to predictions, as those belonging to individualist cultures were expected to complain more than participants belonging to a collective culture. Study 2’s finding for complaining was in contrast with results from Furrer, Liu, and Sudharshan’s (2000, in Liu, Furrer, & Sudharshan, 2001) study, which found that individualist customers experiencing service failure were more likely to complain than were customers from collectivist cultures. However, a further study (Lui et al., 2001) found no relationship between individualism and complaining. Several explanations for the effects of culture on complaining are possible. First, culture was measured on a simple 1-item scale asking participants to list the main culture that they saw themselves as belonging to. This was then matched with country culture scores from Hofstede (2001, see Appendix 4.7.2 for details). This criterion measure may not have been sensitive enough to detect differences in culture. In addition, Study 2 measured a small sample of collectivists (n = 47) compared with individualists (n = 242) in a student population. This small sample size may have affected the results. Finally, this group may have been atypical, having been acculturated into the more individualist society in which they were living. This result requires further investigation.

Based on Affective Events Theory, Hypothesis 17h predicted that the affective predisposition of Negative Affectivity and Positive Affectivity would impact emotions, while Hypotheses 17i and 17j predicted that mood would impact emotions and attributions. However, Study 2 demonstrated that NA, PA and mood had no significant correlation and no linear relationships with emotions. In addition, mood had no significant correlations and no linear relationships with attributions of locus, internal controllability and external controllability. As high NA and PA referred to scores in the top quartile of distribution, while negative mood referred to scores in the lowest quartile of distribution, the result may have been influenced by the very small sample size that was selected for examination. In addition, the student population does not represent a typical population sample, which may also have impacted results. However, as Hypotheses 17h, 17i and 17j were not supported, NA and mood were dropped from further testing.

Study 3 and demographic variables.

In Study 3, the demographic variables of income, age, education and gender were tested as these had been predicted to impact emotions and behavioural intentions. In addition, participants belonging to collectivist cultures were expected to report more external attributions (Hypothesis 17e), lower negative emotions (Hypothesis 17f) and lower negative
behavioural intentions (Hypothesis 17g) than participants belonging to individualist cultures. However, the small number of participants (n = 19, that is, 2% of the sample, a proportion consistent with Brisbane’s general population) that belonged to collectivist cultures precluded investigation of this variable. Hypothesis 17a for Income, Hypothesis 17c for Education, and Hypothesis 17d for Gender were not supported, although Hypothesis 17b for Age was partly supported.

Specifically, in Hypothesis 17b, it was predicted that the youngest age group would report highest negative emotions and behaviours and lowest positive emotions and behaviours, while the oldest age group would report lowest negative emotions and behaviours and highest positive emotions and behaviours. Groups were formed based on similarly-sized clusters of participants aged 18 to 30, 31 to 40, 41 to 48, 49 to 59, and 60 to 95. As predicted, reported negative emotions (anger, fear) and behaviours (disloyalty) were lowest, and positive emotions (joy, sympathy) and behaviours (loyalty) highest, in the oldest age group (60 to 95 years), although the prediction was not supported for the youngest age group. Specifically, results were significantly different for the 60 to 95 age group and all other age groups for fear, disloyalty and loyalty; for the 60 to 95 age group and groups aged 31 to 40, 41 to 48, 49 to 59 for joy and sympathy; and for the 60 to 95 age group and those aged 49 to 59 years for anger. In sum, the 60 to 95 age group had significantly lowest anger, fear, disloyalty and highest joy, sympathy and loyalty of all groups. Thus Hypothesis 17b was partly supported. The finding for more positive and less negative affect in the highest age group was consistent with results from Charles et al.’s (2001) review of emotional wellbeing studies, reported in Chapter 7.

The Study 3 results regarding anger contrasted with findings of Knight et al. (1985). These researchers found that the tendency to respond with anger (measured using the Subjective Anger Scale) steadily declined with age in groups aged 16-20, 21-30, 31-40, 41-50, 51-60, 61-70, and 71+ years). In other words, their 16-20 age group was the most angry. Yet in Study 3, the 49 to 59 age group expressed the highest anger and lowest sympathy for the company. In addition, the 41 to 48 age group was the most fearful and disloyal, while the 31 to 40 age group reported the least joy. The group division of 41-48 and 49-59 (at the time of data collection, referring to those born 1945-1964) coincides with the “Baby Boomer” group. However, Baby Boomers, one of society’s most affluent groups, constitute a large group of frequent flyers (Business and Convention Travelers’ Habits, 2005), and may have therefore potentially the most strongly affected by the air crash scenario. In fact, of business travellers (a group of frequent flyers), 45% were Baby Boomers (Business and Convention Travelers’ Habits, 2005). This spike in disaffected Baby Boomers may have significant implications for crisis management and service failure. However, very little
research has examined age effects on anger or other emotions in a variety of age groups. Therefore, this finding merits further research.

*Emotion Impacts Attitude*

Hypothesis 18, predicting that emotions would impact attitude, was supported. The strongest predictors of attitude were joy and sympathy, followed by anger, and surprise, with the lowest effect for fear. Thus Hypothesis 18 was supported for all emotions.

*Summary of Results*

Summarised results for each hypothesis is listed in Table 64.

**Table 64 Summarised results by hypothesis**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Investigated</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interaction effects for Accounts, Crisis type and Harm on responsibility, accountability, emotions, behavioural intent, attitude</td>
<td>Study 2, Study 3</td>
<td>No interaction effects for Accounts and Crisis types. No interaction effects for Accounts, Crisis types and Harm.</td>
</tr>
<tr>
<td>2. A main effect for Accounts on emotions</td>
<td>Study 2, Study 3</td>
<td>No main effect for Accounts. Accounts significantly impacted anger and sympathy, but not fear, joy or surprise.</td>
</tr>
<tr>
<td>3. A main effect for Accounts on behavioural intent</td>
<td>Study 2, Study 3</td>
<td>No main effect for Accounts. Accounts significantly impacted disloyalty and loyalty, but not complaining.</td>
</tr>
<tr>
<td>4. A main effect for Accounts on attitude</td>
<td>Study 2, Study 3</td>
<td>Attitude failed; scale replaced. Accounts significantly impacted attitude.</td>
</tr>
<tr>
<td>5. A main effect for Accounts on foreseeability, intentionality, accountability, responsibility</td>
<td>Study 2, Study 3</td>
<td>No main effect for Accounts; foreseeability and intentionality removed. Accounts significantly impacted responsibility and accountability.</td>
</tr>
<tr>
<td>7. Crisis types of Locus and Controllability impact behaviour (main effect and interaction)</td>
<td>Study 2, Study 3</td>
<td>No interaction effects. No main effect. Locus: a main effect for loyalty and disloyalty. Controllable: a main effect for loyalty, disloyalty and complaining.</td>
</tr>
<tr>
<td>8. Crisis types of Locus and Controllability impact</td>
<td>Study 2, Study 3</td>
<td>Attitude scale removed as unsuitable. No interaction effects.</td>
</tr>
</tbody>
</table>
9. Crisis types impact attributes, responsibility, accountability, foreseeability, intentionality and involvement (main effect and interaction)  

- Study 2: No interaction effects. Foreseeability, intentionality removed.  
- Study 3: Locus: a main effect for attribution of internal controllability, accountability and responsibility. Controllable: a main effect for locus attribution and responsibility.

9. continued

10. Attributions impact emotions  

- Study 3: No interaction effects. Foreseeability, intentionality removed. Locus: a main effect for attribution of internal controllability, accountability, responsibility. Controllable: a main effect for all three attributions, accountability, responsibility, but not involvement. Attribution of internal controllability predicted anger and sympathy. Attribution of external controllability predicted anger.

11. Involvement impacts emotions  

- Study 3: Involvement impacted anger, fear, joy and surprise but not sympathy.

12. (a) Responsibility, (b) foreseeability, (c) intentionality, (d) accountability impact emotions  

- Study 2: Intentionality, foreseeability removed. Responsibility impacted anger, fear, joy, sympathy and surprise.  
- Study 3: Accountability impacted anger, fear, joy, sympathy but not surprise.

13. Attributions impact behaviour  


14. Emotions impact behaviour  

- Study 3: Anger, fear and joy predicted loyalty and disloyalty. Fear predicted complaining.

15. Attributions of (a) responsibility, (b) foreseeability, (c) intentionality, and (d) accountability impact behavioural intentions  

- Study 2: Intentionality and foreseeability removed. Responsibility predicted complaining but not loyalty or disloyalty. Accountability did not predict behaviour.  
- Study 3: No effects for gender. Age, education, income not tested due to lack of variability in student sample. Age impacted anger, fear, sympathy and joy (but not surprise) and behaviours of disloyalty and loyalty (but not complaining).

16. Attitude impacts behaviour  

- Study 3: Attitude predicted loyalty and disloyalty but not complaining.

17. (a) Income, (b) age, (c) education, and (d) gender impact emotions and behaviour;  

- Study 2: No effects for gender. Age, education, income not tested due to lack of variability in student sample. Age impacted anger, fear, sympathy and joy (but not surprise) and behaviours of disloyalty and loyalty (but not complaining).

- Study 3: No impact on emotions; removed from further analysis.

(e) Culture impacts attributions, (f) emotions and (g) behaviour  

- Study 2: Culture impacted complaining intent.  
- Study 3: Culture removed as insufficient sample size.

(h) NA impact emotions;  

(i) Mood impacts emotions;  

- Study 2: No impact on emotions; removed from further analysis.  
- Study 3: No impact on emotions; removed from further analysis.
(j) Mood impacts attributions.

No impact on attributions; removed from further analysis

18. Emotions impact attitude

Joy, sympathy, anger, surprise and fear predicted attitude

19. Main effect of Harm level on involvement, attributions, responsibility, accountability, emotions, behaviour and attitude.

Study 3

No main effect

Contribution to Theory and Literature

This thesis has made a number of contributions to theory development and testing. This was the first study to have applied Affective Events Theory to a crisis situation. In addition, there were a number of other substantial contributions that are summarised in Table 66 and subsequently explained. Please note that the claim, “this is the first company crisis study”, has the added rider, “to the researcher’s knowledge” attached.

Table 65 Contribution to theory and literature

<table>
<thead>
<tr>
<th>Area</th>
<th>Contribution: To the researcher’s knowledge, this was….</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts</td>
<td>1. The first company crisis study to have investigated the impact of the full range of company accounts in a company crisis on a wide range of consumer reactions.</td>
</tr>
<tr>
<td>Crisis types</td>
<td>2. The first study to examine the range of reactions that consumers recalled experiencing in reaction to company crises, finding that crises elicited a range of attributions, emotions, behaviours and attitudes.</td>
</tr>
<tr>
<td></td>
<td>3. The first study to have empirically examined such a wide range of consumer reactions (attributions, involvement, judgments of responsibility and accountability, emotions, behaviours and attitudes) to company crises.</td>
</tr>
<tr>
<td></td>
<td>4. The first study to have examined the separate effects of Crisis types of Locus and Controllability on consumer reactions.</td>
</tr>
<tr>
<td>Emotions</td>
<td>5. The first study to have tested a range of consumer emotions in a crisis scenario.</td>
</tr>
<tr>
<td>Behaviour</td>
<td>6. The first crisis study to have:</td>
</tr>
<tr>
<td></td>
<td>(a) found that different emotions predicted different behaviours.</td>
</tr>
<tr>
<td></td>
<td>(b) tested AET’s distinction between affect-driven and judgment-driven behaviour.</td>
</tr>
<tr>
<td></td>
<td>(c) found that positive and negative word-of-mouth behavioural intents were not separate constructs when tested with loyalty and disloyalty behaviours.</td>
</tr>
<tr>
<td>Attitude</td>
<td>7. The first crisis study to have:</td>
</tr>
<tr>
<td></td>
<td>(a) identified an array of attitudes of potential interest to researchers.</td>
</tr>
<tr>
<td></td>
<td>(b) found that different emotions predicted attitude.</td>
</tr>
<tr>
<td></td>
<td>(c) demonstrated that attitude predicted behavioural intentions.</td>
</tr>
<tr>
<td></td>
<td>(d) yielded a reliable tested 4-item attitude scale.</td>
</tr>
<tr>
<td>Involvement, accountability</td>
<td>8. The first crisis study that investigated the role of the constructs of involvement, accountability, foreseeability and intentionality.</td>
</tr>
</tbody>
</table>
|                           | 9. The first crisis study to demonstrate that:
Demographic variables
(a) culture affected complaining behaviour; and that
(b) age impacted a range of consumer emotions and behaviour.

AET
10. The first to apply Weiss and Cropanzano’s (1996) Affective Events Theory to
the company crisis domain.

New emotion scale
11. This study:
(a) resulted in the development of a new emotion scale suitable for applying to
company crisis situations.
(b) Refined other scales for application to company crisis use, including an
involvement scale and various behavioural intention scales.

Accounts
The First Company Crisis Study to have Investigated the Impact of the Full Range of
Company Accounts in a Company Crisis on a Wide Range of Consumer Reactions

In 1975, Fishbein and Ajzen noted that the general neglect of information contained in
a message was probably the most serious problem in communication and persuasion research.
For company crisis communication, this statement still holds. Despite the fact that, during a
crisis, the company’s communicated message, including the account selected, may be the only
tool under company control to influence consumer response to a crisis, there has been little
empirical research on crisis communication. In fact, very little research has examined the
optimum account choice in a company crisis.

Although common accounts used by companies in crisis consist of “denial”, “excuse”,
“justification” and “confession”, and the account avoidance response of “no comment”
(subsumed under accounts), no previous company crisis study, to my knowledge, had
examined the impact of all five accounts on consumer reactions. Jorgensen’s (1996) study had
examined accounts of “denial” and “confession”, finding that these accounts impacted
punitiveness, anger and sympathy, purchase intentions and investment intentions, but not
attitude. Griffin et al.’s (1991) negative publicity scenario investigated “no response”,
“denial” and a “redress” response in which the researchers made concerted efforts to remedy
problems and provide information. The researchers found more negative attitudes for “no
response” and “denial” and more positive attitudes for “redress”, but no conclusive results for
purchase intentions. Kaman Lee (2004), using communication’s apologia framework,
examined “no comment”, “blame-shifting” (equivalent to “excuse”), “minimization”
(equivalent to “justification”) and three separate components of “confession” (compensation,
corrective action, apology), but not “denial”. Kaman Lee (2004) aggregated “no comment”,
“justification” and “excuse” and compared them with the three aggregated “confession”
accounts, finding that the first grouping resulted in a higher responsibility judgment, while the combined “confession” resulted in higher sympathy and trust.

My Study 3 demonstrated that Accounts significantly impacted emotions of anger and sympathy, behavioural intentions of loyalty and disloyalty, attitude, and judgments of responsibility and accountability, with “confession” being the most successful account for positive outcomes. This study therefore added to the small body of empirical research investigating impact of company accounts on consumer reactions in crisis situations.
Crises

Explored the Wide Range of Consumer Reactions that Crises Elicit in Consumers

My Study 1 was, to my knowledge, the first to examine the range of reactions that consumers recalled experiencing in reaction to company crises, finding that crises elicited a range of attributions, emotions, behaviours and attitudes. Previous studies had been empirical, building upon prior studies and examining research-driven constructs.

Empirically Examined Wide-Ranging Consumer Reactions to a Company Crisis Scenario

My Study 2 and Study 3 were the first to test a wide range of consumer reactions (causal attributions, involvement, judgments of responsibility and accountability, attributions of foreseeability and intentionality, emotions, behaviours and attitude) to a company crisis. However, Study 2 found foreseeability and intentionality were not useful in this application.

Separate effects for Crisis types of Locus and Controllability on Consumer Reactions

In Chapter 2, I had made the argument using Weiner’s Attribution Theory (1986, 1995b) for the existence of Crisis types based on the causal dimensions of Locus (either internal or external) and Controllability (either controllable or uncontrollable). In previous crisis studies, Jorgensen (1996) and Kaman Lee (2004) had examined internal controllable crises, and external uncontrollable crises, while Jorgensen (1994) had tested the ambiguous crisis, consisting of a combination of both crisis types. However, mine was the first crisis study to examine, and find, that Locus (internal, external) and Controllability (controllable, uncontrollable) crises had separate effects on consumer reactions. Previously, Folkes’ (1984) investigation of product failure (restaurant meal) had found that Locus was correlated with deservingness of being charged and receiving an apology, Controllability was correlated with feelings of anger and desire to hurt the restaurant’s business and Stability was correlated with expectancies of type of redress preferred. My results indicated different effects for both Locus and Controllability, reported in Chapter 7 in Table 59. Thus, while each of these dimensions was assumed to exist on a single causal continuum, results indicate that these concepts may be multidimensional.
**Consumer Emotions**

*Tested a Range of Consumer Emotions in a Crisis Scenario*

The study of consumer emotions in reaction to organisations is a new research field (Zerbe & Härtel, 2000). Most studies of consumer affect have focused on consumers’ responses to advertising (Richins, 1997). Previous studies on product failure and company crisis have used Weiner’s (1986) attribution theory, which limited examination of emotional reactions to anger and sympathy, perhaps for parsimony. This was the first study that not only identified that, in reaction to a company crisis, consumers recalled emotions felt towards companies in the categories of anger, fear, joy, love, sadness and surprise, but also tested these emotions.

While the emotion of love was removed from further analysis in Study 2, and sadness was renamed sympathy, my Study 2 and Study 3 found that consumers reported emotions of anger, fear, joy, surprise and sadness, and that these emotions were impacted by different variables. In turn, emotions of anger, fear, joy, surprise and sympathy impacted attitude and behavioural intentions. The finding that different emotions acted as drivers of different consumer behavioural intentions was consistent with predictions from Affective Events Theory (Weiss & Cropanzano, 1996). AET had never before been tested in a crisis scenario.

**Consumer Behaviour**

Very little research has examined how distinct emotions differentially impact behaviours (Luce, 2001). In addition, Weiss and Cropanzano’s Affect Events Theory made the distinction between attitude-driven behaviour and affect-driven behaviour. Yet this had not been tested before in a crisis scenario.

My Study 3 found that emotions of fear and anger impacted disloyalty, while there were negative relationships between both joy and disloyalty, and attitude and disloyalty. Joy and attitude impacted loyalty, while there were negative relationships between both fear and loyalty, and anger and loyalty. Therefore, AET’s distinction between affect-driven and judgment-driven behaviour was not supported when applied to company crisis scenarios.

While positive and negative word-of-mouth (WOM) behaviours are well established in the literature, these were not supported as separate constructs when tested with loyalty and disloyalty behaviours. In Study 2 and Study 3, positive WOM behaviour loaded with loyalty, and negative WOM behaviour with disloyalty, despite new measures being located for Study
3. This may suggest that there are substantial overlaps between these constructs. However, as WOM had not previously been tested in crisis scenarios, this effect may be crisis-specific, and perhaps even service-specific.

**Attitude**

*Crisis Elicit an Array of Consumer Attitudes*

Study 1 indicated that an array of attitudes may play a role in crisis outcomes. Focus group participants had both positive and negative attitudes towards crisis advertising. Reports indicated that the reception for crisis advertising may be partially dependent upon either Crisis type (with corporate advertising less liked in an internal controllable crisis) or on responsibility (with corporate advertising less liked where the company was perceived as responsible).

In addition, pre-existing negative attitudes may play a role in crisis outcome, in particular, attitudes to large corporations and attitudes to company management. These attitudes may result from the increasing “salary gap” between management and workers. There was also the attitude that government and regulatory authorities (at least in Australia) were partly responsible in some crises due to deregulation procedures, which transfers responsibility for safety measures away from government to companies. Participants also had strong opinions regarding factors that constituted successful crisis management.

**Different Emotions Predicted Attitude**

While Jorgensen (1996) had tested anger and sympathy, finding that the combined negative emotion predicted attitude, my Study 3 found that emotions of anger, fear, joy and surprise all significantly predicted attitude.

**Demonstrated that Attitude Predicted Behavioural Intentions**

A crisis study by Griffin et al. (1991) and Jorgensen (1996) found that, while accounts impacted attitude, there was no clear attitude-purchase intention link. However, my Study 3 demonstrated that attitude played a role in explaining crisis outcomes by predicting behaviour. Specifically, attitude predicted loyalty, while there was a negative relationship between attitude and disloyalty.

The lack of effect in the earlier studies may have been due to attitude’s operationalisation in the instruments used. Griffin et al.’s (1991) attitude measure consisted of a scale with terms covering three attitude dimensions – activity, evaluation and potency.
Jorgensen (1996) used a 2-item attitude measure (“very favourably-very unfavourably”, “very bad-very good”). In Study 2, my 3-item scale was similar to Jorgensen’s (1996) measures (“unfavourable-favourable”, “bad-good”, “negative-positive”). These items loaded on the same factors as behaviours. However, in Study 3, the attitude scale by Milliman et al. (1991) was successful. The 6-item scale measured items that were decidedly different from other attitude scales. After the confirmatory factor analysis, this scale consisted of four items (likeability, trustworthiness, overall general impression, professional ability). Thus Study 3 yielded a tested and shortened 4-item scale that was effective in measuring attitudes in a crisis scenario.

Tested New Constructs in a Company Crisis Scenario

Apart from various emotions and behaviours never tested previously in a crisis scenario, Study 2 and Study 3 also tested the application of a number of constructs: attributions of foreseeability and intentionality, involvement and a judgment of accountability. In Study 2, as earlier mentioned, foreseeability and intentionality were removed.

Involvement

While AET had referred to primary appraisal of the importance of an event, for primary appraisal, I substituted the well-developed marketing construct of involvement. To my knowledge, this was the first time that this concept had been tested in a company crisis study. As involvement referred to the primary appraisal of the importance of the crisis to a consumer’s concerns, values, needs, interests, goals and beliefs, it makes intuitive sense that, the more involved is a consumer with a crisis, the stronger their emotional reactions. Involvement was found to impact anger, fear,joy and surprise but not sympathy, demonstrating that involvement plays a role in determining consumer emotions during a company crisis.

Accountability

For the first time in a crisis study, the construct of accountability was tested. Current thinking is that accountability is a rule and norm enforcement mechanism through which societies control their members’ conduct (Beu & Buckley, 2001; Schlenker et al., 1990; Tetlock, Skitka, & Boettger, 1989). Findings from Study 3’s confirmatory factor analysis demonstrated that this was a separate (although related) construct to responsibility. Both accountability and responsibility were found to play an important role in predicting emotions, with both being better emotion predictors than attributions.
Demographic Variables

Study 2 and Study 3 tested the effects of various demographic variables: age, gender, income, education and culture. Due to the homogeneity of the student population sample in Study 2, income levels, age and education showed little variability and were not examined, although gender and culture were tested. In Study 3, culture was not tested, but age, gender, income and education were examined.

Study 2 found, for the first time in a crisis study, that culture impacted complaining, with those belonging to a collectivist culture significantly more likely to complain in a crisis situation than those belonging to individualist cultures.

In Study 3, for the first time in a crisis or service failure study, age was found to predict consumer emotions and behaviours, with the 60 to 95 age group reporting significantly lower anger, fear, disloyalty and the highest joy, sympathy and loyalty, compared to most other age groups, although surprise and complaining were not impacted.

Application of Affective Events Theory

This research was the first to apply Weiss and Cropanzano’s (1996) Affective Events Theory to the company crisis domain, demonstrating that the main structure of the theory can be appropriately applied to crises. This work also demonstrated that the constructs of mood and Negative Affectivity were not applicable to the particular scope of the crises that I examined.

Development of Emotion Scale

No suitable scales previously existed for testing emotions in a company crisis scenario. As a result, I used Study 1 as the groundwork to develop a new set of emotion scales that were suitable to apply to company crisis scenarios. These scales were tested and refined in Study 2 using EFA, and in Study 3 using both EFA and CFA, resulting in a new set of reliable emotion scales. The scales measured anger, fear, sympathy, joy and surprise.

In addition, I tested and adjusted a number of other scales for application to company crisis situations. For behaviour, involvement and attitude, existing scales were adapted and refined in Studies 2 and 3, resulting in scales that were useful for crisis situations. While the instruments for attributions and responsibility were established reliable scales (Karuza et al.’s 1990 responsibility scale and McAuley et al.’s 1992 attribution scale), each scale had one
item that demonstrated low construct validity when applied to a crisis, and these items were removed. The importance of the construct of accountability, measured in a 1-item scale indicated the need for future development and expansion of this scale. The attitude scale, reduced in size from that developed by Milliman et al. (1991), was found to be suited to crisis situations.

Study 2 and Study 3 also indicated problems with the construct of word-of-mouth behaviour, both positive and negative, demonstrating that these behaviours were not separate constructs to loyalty and disloyalty. Measuring instruments were developed and tested which showed good internal consistency, good construct reliability and as a result, add to the tests available for crisis researchers – see Table 66.
### Table 66 Reliability of each measure in Studies 2 and 3

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pilot 1 alpha</th>
<th>Pilot 2 alpha</th>
<th>Changes made</th>
<th>Study 3 alpha</th>
<th>Changes made</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>.91</td>
<td>–</td>
<td>10-item scale reduced to 4-item</td>
<td>.91</td>
<td>4-item scale retained</td>
</tr>
<tr>
<td>Responsibility</td>
<td>.79</td>
<td>–</td>
<td>3-item scale retained</td>
<td>.78</td>
<td>Reduced to 2-item scale</td>
</tr>
<tr>
<td>Attrib: locus</td>
<td>.71</td>
<td>.68</td>
<td>3-item scale retained</td>
<td>.80</td>
<td>3-item scale retained</td>
</tr>
<tr>
<td>Attrib: internal</td>
<td>.82</td>
<td>.68</td>
<td>3-item scale retained</td>
<td>.83</td>
<td>3-item scale retained</td>
</tr>
<tr>
<td>controllability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attrib: external</td>
<td>.74</td>
<td>.73</td>
<td>3-item scale retained</td>
<td>.68</td>
<td>Reduced to 2-item scale</td>
</tr>
<tr>
<td>controllability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>.86</td>
<td>.85</td>
<td>7-item scale retained</td>
<td>.89</td>
<td>4-item scale</td>
</tr>
<tr>
<td>Fear</td>
<td>.93</td>
<td>.88</td>
<td>7-item scale retained</td>
<td>.93</td>
<td>4-item scale</td>
</tr>
<tr>
<td>Sympathy</td>
<td>.73</td>
<td>.79</td>
<td>Adjusted up to 4-item</td>
<td>.85</td>
<td>4-item scale</td>
</tr>
<tr>
<td>Joy</td>
<td>.83</td>
<td>.81</td>
<td>Adjusted up to 4-item</td>
<td>.83</td>
<td>4-item scale</td>
</tr>
<tr>
<td>Surprise</td>
<td>.68</td>
<td>.73</td>
<td>Adjusted up to 5-item</td>
<td>.86</td>
<td>4-item scale</td>
</tr>
<tr>
<td>Complaining</td>
<td>.93</td>
<td>.93</td>
<td>Retained as 4 item</td>
<td>.89</td>
<td>4-item scale</td>
</tr>
<tr>
<td>Word-of-mouth</td>
<td>.72</td>
<td>.69</td>
<td>New items located for Study 3</td>
<td>Failed</td>
<td>-WOM only retained.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EFA and CFA indicated incorporation into loyalty</td>
</tr>
<tr>
<td>Disloyalty (Study 2:</td>
<td>.87</td>
<td>.77</td>
<td>4-item scale retained</td>
<td>.94</td>
<td>4-item scale created from</td>
</tr>
<tr>
<td>Switching; Study 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-WOM and Withdrawal of Custom</td>
</tr>
<tr>
<td>Withdrawal of Custom)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>.93</td>
<td>.78</td>
<td>4-item scale retained</td>
<td>.85</td>
<td>4-item scale</td>
</tr>
<tr>
<td>Attitude</td>
<td>Failed</td>
<td>–</td>
<td>New scale located</td>
<td>.93</td>
<td>Reduced from 7- to 4-item</td>
</tr>
</tbody>
</table>

This research therefore adds substantially to the literature on company crises and consumer behaviour.
Managerial Contributions and Implications

*Accounts*

My managerial decision tree, predicting that Accounts and Crisis types would interact so that certain Accounts would result in either better or worse consumer outcomes, depending on the different Crisis types (Hypothesis 1) was not supported, although the results were often in expected directions, as shown in Table 67 and Table 68. For managers, this means that there is no best Account choice for a particular crisis type.

Senior executives also should note that, irrespective of Crisis type, “confession” resulted in significantly better consumer outcomes. Specifically, use of “confession” resulted in significantly higher consumer sympathy, loyalty, positive attitude and significantly lower anger. This finding should encourage managers to make greater use of this account when companies are at fault, instead of the stance frequently recommended by legal advisors of refusing to take responsibility for crises. Another factor in favour of “confession” was that it the most credible communicated response, no matter what the crisis type, being considered significantly more credible than all other accounts. The positive results for “no comment” may indicate that this response is suitable to use in the early stages of a crisis.

Managers would be ill-advised to use accounts of “denial”, “excuse” and “justification”, all of which result in significantly higher anger and lower sympathy than “confession” and “no comment”. As anger drives complaining and sympathy impacts attitude, use of these accounts may alienate consumers. In addition, while “denial”, “excuse” and “justification” resulted in similarly poor consumer outcomes, “excuse” also had additional negative impacts. Giving an excuse involves managers pointing out unforeseen or extenuating circumstances and includes use of scapegoats. Managers should note that its use resulted in significantly higher disloyalty (incorporating behaviours of switching and negative word of mouth), negative attitude and judged responsibility for the crisis.
Table 67 Account producing best (but non-significant) consumer results in different Crisis types

<table>
<thead>
<tr>
<th>Crisis type</th>
<th>Crisis type</th>
<th>Anger</th>
<th>Fear</th>
<th>Sympathy</th>
<th>Joy</th>
<th>Complain</th>
<th>Disloyalty</th>
<th>Loyalty</th>
<th>Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>Controllable</td>
<td>Confession</td>
<td>Denial</td>
<td>Denial</td>
<td>No Comment</td>
<td>Confession</td>
<td>Confession</td>
<td>Confession</td>
<td>Confession</td>
</tr>
<tr>
<td>Internal</td>
<td>Uncontrollable</td>
<td>Confession</td>
<td>No Comment</td>
<td>Confession</td>
<td>Confession</td>
<td>Confession</td>
<td>Confession</td>
<td>Confession</td>
<td>Confession</td>
</tr>
<tr>
<td>External</td>
<td>Controllable</td>
<td>No Comment</td>
<td>No comment</td>
<td>Confession</td>
<td>No Comment</td>
<td>No Comment</td>
<td>No Comment</td>
<td>Confession</td>
<td>Confession</td>
</tr>
<tr>
<td>External</td>
<td>Uncontrollable</td>
<td>Confession</td>
<td>Excuse</td>
<td>Confession</td>
<td>Excuse</td>
<td>Confession</td>
<td>No Comment</td>
<td>Confession</td>
<td>Confession</td>
</tr>
</tbody>
</table>

Table 68 Account producing worst (but non-significant) consumer results in different Crisis types

<table>
<thead>
<tr>
<th>Crisis type</th>
<th>Crisis type</th>
<th>Anger</th>
<th>Fear</th>
<th>Sympathy</th>
<th>Joy</th>
<th>Complain</th>
<th>Disloyalty</th>
<th>Loyalty</th>
<th>Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>Controllable</td>
<td>Justification</td>
<td>Justification</td>
<td>Excuse</td>
<td>Excuse</td>
<td>Justification</td>
<td>Justification</td>
<td>Excuse</td>
<td>Excuse</td>
</tr>
<tr>
<td>Internal</td>
<td>Uncontrollable</td>
<td>Justification</td>
<td>Justification</td>
<td>Excuse</td>
<td>No Comment</td>
<td>Excuse</td>
<td>Excuse</td>
<td>Denial</td>
<td>Denial</td>
</tr>
<tr>
<td>External</td>
<td>Controllable</td>
<td>Excuse</td>
<td>Excuse</td>
<td>Justification</td>
<td>Denial</td>
<td>Denial</td>
<td>Excuse</td>
<td>Justification</td>
<td>No Comment</td>
</tr>
<tr>
<td>External</td>
<td>Uncontrollable</td>
<td>Justification</td>
<td>Justification</td>
<td>Denial</td>
<td>Denial</td>
<td>Justification</td>
<td>Justification</td>
<td>Justification</td>
<td>Justification</td>
</tr>
</tbody>
</table>
Crisis Types

The two Crisis types proved to be the best predictors of consumer reactions. This means that, if the crisis cause is evident to consumers (usually via media stories), managers can predict likely reactions to their type of company crisis, especially as each of the different crises had some unique effects.

Extrapolating from the results found, managers can expect that the more the cause of the crisis is perceived to be internal to the company, the more consumers would consider the company to be responsible and hold them accountable, the more angry, fearful and disloyal they could expect consumers to be, and the more consumers will attribute the crisis cause to be under internal company control. When the crisis cause is outside or external to the company, consumers will exhibit more loyalty, joy and a better attitude and attribute the crisis cause to be under the control of external factors or people. Managers can expect that the more cause of the crisis was perceived to be under the company’s control, the more likely consumers are to hold the company responsible and accountable, and to be disloyal and complain. The more uncontrollable the crisis cause was by the company, the more joyful, sympathetic and loyal consumers are likely to be, and the more likely to have a better attitude to the company.

While few managers would prefer to announce via the media that the crisis was caused by factors inside the company or controllable by it, the reality is that these facts will be made public sooner or later. Knowing likely consumer reactions means that managers can focus on positive factors such as company reputation, lack of previous history of such a crisis, and company efforts in crisis management. This is also the opportunity to use the company account of “confession”, taking responsibility for the crisis and making efforts to remedy the situation as this account mitigates negative consumer reactions.

Another implication is that, when the crisis cause is either external to, or uncontrollable by, the company, managers need to carefully monitor media reporting so that this is made very clear in all communications so as to minimise negative consumer impact.

Severity of Harm

Severity of Harm was introduced as an independent variable following Study 2, operationalised via scenarios involving high impact (33 deaths) and low impact (33 injuries, none severe) situations. Despite both Study 2 (Pilot 4) and Study 3 findings that participants
perceived the injury levels as significantly different, there were no main effects on consumer reactions. For managers, this finding is particularly alarming. The results mean that, in a crisis, no matter whether there was severe harm to consumers or a low harm level, consumers reacted similarly. These results confirm similar findings from Kaman Lee’s (2004) plane crash study using Hong Kong residents in which the conditions were severe (200 injured) and extremely severe (300 killed). For managers, the implication is that, no matter whether a crisis results in 33 minor injuries, 200 injuries, 33 dead or 300 dead, consumers reactions are the same, and this is likely to apply across cultures.

**Involvement**

Involvement refers to consumers’ appraisal of the importance of the crisis to their concerns, values, needs, interests, goals, and beliefs. Consumers reported a very high mean level of involvement with all crisis types (\( M = 6.26 \) on a seven point scale). This is meaningful for managers because involvement was found to significantly predict emotions, which in turn, predicted behavioural intentions. Specifically, involvement impacted consumers’ anger, fear, joy and surprise. As anger, fear and joy predicted loyalty and disloyalty, and fear predicted complaining, for managers, this means that all crises may have the potential to create consumer reactions. In sum, managers need to be aware that consumers will become involved with crises of all types and that this will result in consumer emotional reactions to the crisis, which in turn, are likely to result in either negative or positive behavioural reactions.

**Attributions and Judgments of Responsibility and Accountability**

Judgments of responsibility and accountability were two of the strongest predictors of consumer reactions. The company’s level of responsibility for the crisis was the strongest predictor of anger, fear and surprise, the second strongest predictor of sympathy, and the third strongest predictor of joy and complaining. Accountability was the strongest predictor of joy, the second strongest predictor of anger, the third strongest predictor of fear and sympathy. The importance of these two variables in predicting consumer emotions and behaviour highlights the need for managers to conduct consumer research during the crisis outbreak, in order to predict the judgments consumers make against the company which, in turn, affects the sequence of reactions leading to outcomes such as complaining.

The results from both Study 1 and Study 3 indicated that attributions of locus, internal controllability and external controllability strongly impacted consumer reactions, indicating
that they continue to play an important role in predicting crisis outcomes. Specifically, Study 3 found that the locus (internal/external) attribution impacted complaining, an attribution of internal controllability predicted anger, disloyalty and sympathy (-), and an attribution of external controllability impacted anger and complaining. For managers, the results indicate the necessity for companies not just to monitor crisis media stories, but to also monitor consumer attributions about the crisis. As was seen in the Ansett airline safety crisis, three different attributions were made about the crisis cause, each of which engendered different consumer reactions. When Ansett was perceived to be at fault in the internal controllable crisis, attributions about the crisis cause not only resulted in high anger directed at the company, but also flowed on to affect perceptions of the company’s management, with the credibility of the message and the spokesperson questioned, as well as the company’s handling of the crisis, and its advertising campaign.

Therefore, managers need to consider the use of consumer research to discover the direction of current attributions and judgments, remedy any misconceptions, and reduce consumer and company impacts.

Demographic Variables

As older consumers (aged 60+) reported weaker negative reactions to crisis, it may appear at first glance that companies involved in a crisis need to direct less recovery effort to this group. However, the 60+ age group reported negative emotions that were still relatively high. Using a 7-point scale, the means were high for anger ($M = 4.00$) and fear ($M = 4.21$), while positive emotions were low for joy ($M = 2.62$) and sympathy ($M = 3.70$). In addition, loyalty ($M = 2.76$) behaviour was still low, while disloyalty was around the mid-point ($M = 3.40$). Therefore, when a product or service crisis impacts an older demographic, recovery efforts should still be targeting this group.

The results also gave clear pointers to the strong negative impact on the two Baby Boomer groups (those aged 41 to 48 years, or 49 to 59 years at the time of the data collection). For managers, this means that there is a need for particularly strong recovery efforts directed at this group, particularly as results showed that these two groups were most likely to “vote with their feet”, taking their business elsewhere and indulging in negative word of mouth behaviour, rather than complaining. Managers may find that this group may be responsive to “confession” with its attempt apology and compensation.
In addition, Study 2, which tested a younger demographic group, showed that collectivists were more likely to complain than individualists, leading to the expectation that where a crisis affects a collectivist group, companies may need to be prepared to receive more consumer complaints. However, as this is in contrast to findings by other researchers, the results may be limited to this cohort of students.

**Other Effects**

In Study 2, Pilot 4, it was of interest to note that use of the plane crash photograph resulted in lower levels of perceived harm than when the photograph was not used. While this was tested on a small sample, it may indicate that when there is serious injury and/or damage, consumers may tend to overestimate negative results when visual evidence of the extent of the damage is not provided. For managers this means that, even in crises where there is severe damage and consumer harm, it is best to provide visual evidence to the media of the damage involved for dissemination to stakeholders.

**Limitations**

This study had a number of limitations which have been previously reported in Chapters 2, 4, 6 and 7.

First, there are some limitations of using a positivist paradigm (Berger & Luckmann (1967, in Zinkhan & Hirschheim, 1992). Besides those of the research design, this research had other limitations. One main one was that the operationalisation of Crisis types as created crisis news stories called for imagined responses to the crisis scenario. Thus the findings may not apply to actual crisis situations.

Additionally, there are issues of sampling. The Study 1 focus groups were exploratory and therefore not generalisable. Study 1 used a sample self-selected in response to publicity, therefore there may have been demand characteristics. Some emotional contagion occurred, raising the issue of internal consistency. Sampling in Study 2 was limited by the use of a student group. One of Study 2’s limitations was sampling bias through the use of a convenience sample of students, which led to some sacrificing of external validity. As the student sample had different demographic characteristics to the general population sample this may have affected the pilot testing of constructs, possibly leading to premature deletion of constructs and affecting instrument development. Although Study 3 used a randomly selected general population sample, there may have been a non-response bias.
In both Study 2 and Study 3, the very nature of the experimental design captured a static process that may not reflect the dynamic processes that take place in the external environment during a crisis. As such, generalisability to an actual crisis may be limited.

The very nature of the variables of interest in this study may have created weaker statistical effects than if other variables had been chosen. As Tabachnik and Fidell (2001) contend, even moderately correlated DVs diminish the power of a MANOVA (Tabachnik & Fidell, 2001).

Recommendations For Future Research

Directions From Focus Group Research

The focus groups opened up a range of interesting directions for future research. As emotion is short-lived, there was the expectation that behaviour resulting from a crisis would also be short-lived. However, focus group participants reported continuing product boycotts many years after a crisis, which appeared to be habitual punitive behaviour. In some instances, it appeared as if a past decision to boycott products from a particular company, such as Nestlé or Ford, was firmly entrenched, and rarely reviewed or questioned. While Klein, Craig Smith, and John (2004) discussed the innate moral reasoning behind boycott actions, this does not explain habitual boycott, which impacts long-term purchase behaviour, and may be of great interest to companies.

In addition, focus group participants reported an interesting phenomenon earlier discussed in Chapter 2: that reminder cues, such as media stories or crisis discussion, re-ignite the involvement process, resulting in a re-experiencing of dominant crisis emotions. Additionally, as Levine et al. (2001) suggested that emotion may be reconstructed in view of later attributions, this may mean that following later official public enquiries into the crisis, if blame is placed on the company, reminder cues may re-ignite the consumer reaction process, potentially resulting in the revision of attributions, emotions, and possibly, behaviours. The extent that this occurs, and whether this re-experience means that emotions may be reconstructed on the spot (as some researchers suggest), is not known.

Also of interest was the avoidant behaviour participants discussed in specific crises, such as that affecting Kraft peanut butter, where the product was contaminated with mouse
droppings. This appeared somewhat like a classical conditioning response, with the product paired with the negative stimuli, resulting in feelings of disgust towards the product. As this impacted participants’ purchase and usage behaviour, with some long-term effects, this could potentially be of interest to companies. As yet, it appears not to be researched.

The focus group identified variables, previously not discussed in the crisis literature, but which appear to have some impact on crisis outcomes. There are a number of potential areas that require further investigation: (i) the attitude that government and regulatory authorities (at least in Australia) must bear some responsibility for crises, based on government deregulation of industries. This was considered to result in removal of consumer safeguards; (ii) the factors that determine whether crisis advertising is perceived positively or negatively are not clear, although it appeared that crisis type and perceived crisis responsibility may play a role; (iii) the extent to which pre-existing negative attitudes to large corporations impact crisis outcome is not known; (iv) pre-existing negative attitudes to corporate management, affected by recent corporate collapses, criminal sentencing of executives and multi-million dollar salary packages, may also impact crisis outcome; (v) the factors that consumers consider essential for successful crisis management is not known; (vi) there needs to be further understanding of participants’ dichotomous attitude to the media, which were considered partially responsible for beating up a crisis, while also being viewed as keeping the community informed on safety issues; (vii) to extent to which dispositional attributions were made about the company is unknown, which may result from message effects (whether the message is considered a lie and whether penitence is shown). All of these areas may provide areas for future research.

**Directions from Study 2 and Study 3**

This research was intended to provide guidance to company management on best Account choice in different types of Crisis. This research indicated the importance of adding to knowledge by investigating actual crises in the field. Thus real crisis situations with real implications for consumers should be used to further test the external validity of findings as justification for the importance of this study to consumer research and crisis management literature.

Different crises and accounts need to be investigated. In addition, more work on the factors that make an account credible seems warranted.
As this was the first time that the constructs of involvement and accountability were tested in company crisis scenarios, with results indicating that these constructs impact consumer outcomes, further testing would be desirable.

The role of demographic variables such as age and culture on consumer reactions may also prove fruitful. In particular, the strong reported negative emotional reactions of the Baby Boomer groups appears untested, not just in crisis contexts, but in situations such as service failure.

In Study 2, Pilot 4, when investigating the impact of the plane crash photograph in the news story vignette, use of the crash photograph resulted in lower levels of perceived harm than when the photograph was not used, particularly in the high harm situation. This was in contrast to findings by Weinberger and Romeo (1989) who found that use of a negative visual decreased consumer purchase intentions. This is another area for future investigation.
APPENDICES
MEDIA RELEASE – 24.5.01
VOLUNTEERS NEEDED FOR CONSUMER CRISIS STUDY

Volunteers are urgently needed for a Monash University study investigating how people feel about company crises like the Mad Cow disease outbreak, the Legionella contamination at the Melbourne Aquarium and the peanut butter crisis which hospitalised children across Australia.

Associate Professor, Dr Charmine Härtel, the chief investigator for the study, said a wide range of people were needed to participate in the study investigating the impact of a company crisis on consumers.

“We would highly value people’s thoughts and feelings”, Dr Härtel said.

“This study is the initial stage of a larger project undertaken by one of our research students and is intended to provide organisations with crisis management guidelines. We are gathering groups of 10 people together in ‘focus groups’ to talk freely about their feelings with each other. As the study is being held at the university’s Caulfield campus in the evenings, we will provide refreshments and $25 for travel costs”, she said.

The series of focus groups will be held from 6pm to 8pm on week nights from June 12 to 21 at Monash University’s Caulfield campus. Potential volunteers are asked to phone the assistant researcher on (03) 9903 2672 during office hours for information about the crisis study.

FURTHER INFORMATION:
Lyn McDonald
Assistant researcher
Department of Management
Monash University
Phone: (03) 9903 2672
Mobile: 0402 827 141
MEDIA RELEASE – 24.5.01
CONSUMERS NEEDED FOR CRISIS STUDY

Consumers with an interest in company crises like the Mad Cow disease outbreak, the Legionella contamination at the Melbourne Aquarium or the peanut butter crisis which hospitalised children are urgently required for a Monash University study.

Associate Professor, Dr Charmine Härtel, the chief investigator for the study, said a wide range of people were needed to participate in the study investigating the impact of a company crisis on consumers.

“We would highly value people’s thoughts and feelings about the crisis and the companies involved”, Dr Härtel said.

“This study is the first stage of a larger project undertaken by one of our research students and is intended to provide organisations with crisis management guidelines. We are gathering groups of 10 people together in ‘focus groups’ to talk freely about their feelings about various crises. As the study is being held at the university’s Caulfield campus in the evenings, we will provide refreshments and $25 for travel costs”, Dr Härtel said.

The series of focus groups will be held from 6pm to 8pm on weeknights from June 12 to 21 at Monash University’s Caulfield campus. Potential volunteers are asked to phone the assistant researcher on (03) 9903 2672 during office hours for information about the crisis study.

FURTHER INFORMATION:
Lyn McDonald
Assistant researcher
Department of Management
Monash University
Phone: (03) 9903 2672
Mobile: 0402 827 141
Appendix 4.3 Community Radio Announcement

COMMUNITY RADIO ANNOUNCEMENT (sent to news editors)
Monash University wants consumers to voice their feelings in a study on company crises like the Legionella contamination at the Melbourne Aquarium or the Mad Cow disease outbreak. The University’s Dr Charmine Härtel said a wide range of people were needed to participate in the study investigating the impact of a company crisis on consumers.

The study will be held at Monash University’s Caulfield campus and participants will receive $25 travel costs and refreshments. Phone the uni on 9903 2672 during office hours for more information about the crisis study.

FURTHER INFORMATION:
Lyn McDonald
Assistant researcher
Department of Management
Monash University
Phone: (03) 9903 2672
Mobile: 0402 827 141
Hi, I’m Lyn McDonald, the student researcher on the crisis project and this project forms part of my studies.

Ask for their name.

“We’re looking for volunteers to join groups to talk about their feelings and how they might act towards companies following a crisis. How the focus group works is this way: We ask you to arrive at 6pm at the Caulfield campus. There will be signposts leading you to the room where we’ll provide you with some refreshments and give you a chance to meet some of the other people there. We’ll provide you with badges with your first name only on it. We have a researcher who will lead the discussion and introduce some topics for you to discuss, including your feelings and how you might behave towards companies following a crisis. This session will last until about 8pm. The group will be videotaped and audio-taped, simply to allow the researchers and the assistants on the project to accurately transcribe what people say during the group. This information will not be seen by anyone outside this team. When commencing focus groups, ground rules will be described which include the request that all information given by participants during the focus groups sessions stay confidential. If you are not comfortable at any stage, you are free to leave. If you are interested in participating in the study, we will also give you a $25 cheque towards your travelling costs. We would also like to advise you that some people may find talking about company crises distressing. Would you be interested in participating in the study?”

No: “Thank you very much for your interest.”

Yes: “I will forward you a letter containing a written explanation, a consent form, a form asking for details about yourself – name/address/date of birth/gender/education/income range/education/cultural background. There will also be a stamped envelope indicating the date of return on the forms for you to post to us. I may phone you if this is delayed. After I receive the forms, I will phone you to ask you to attend a focus group on a particular night and give you details of how to find us.

Ask for their postal address and phone number.

“Thank you very much for your assistance with the Crisis Study”.
Appendix 4.5 Explanatory Statement for Posting Out to Volunteers

Explanatory Statement for Company Crisis Study affecting Consumers

Many people in Victoria have been affected by a number of company crises in recent years that may have impacted on the health or wellbeing of themselves or someone they care about, or affected their standard of living. Last year there was the legionella outbreak at the Melbourne Aquarium. Before that the Longford gas explosion and subsequent gas shortage which seriously affected many businesses and residents. There was the peanut butter contamination with salmonella which resulted in the hospitalisation of children.

My name is Lyn McDonald and I will be conducting research on the way that company crises impact on consumers. I am working towards a Masters of Management at Monash University and conducting this research under the supervision of Dr Charmine Härtel, an Associate Professor in the Department of Management. You have received this letter because you phoned in your interest in participating in the study.

We are interested in the views of a broad cross section of consumers. The aim of this study is to examine the thoughts and feelings that people like yourself have towards companies involved in crisis situations and how this might affect their behaviour towards the company. This is the first of a series of studies and I hope that the findings from this project will improve the way that organisations manage crises.

I am seeking people over 18 years of age who are willing to discuss their views and how they feel about company crises. If you are under 18, you are unable to take part in this research.

Being part of this research will take about two hours for one weekday evening from 6pm to 8pm between June 12 to June 21 2001, including time for refreshments. It will take place in the conference room, level 3, N building at Monash University’s Caulfield campus. A map is attached. Participants will be paid $25 to help reimburse travelling costs. Because there may be more participants than required, it may be possible that you may not be required to participate in this study. If you are selected to participate, I will phone you at work or home to ask you if it is convenient for you to attend a focus group on a particular weeknight.

Participation in this research is entirely voluntary. If you agree to participate you may withdraw at any time. There is a possibility that some of the crises discussed may have personally affected you or people close to you and talking about this may bring up distressful memories. If, at any time in the focus group you don’t feel comfortable, we will stop proceedings. The person who is running the focus groups is a trained counsellor and is available to talk with you on the night. If you feel you require counselling following the focus group discussion, we can refer you to counsellors at Community
Services at any of Monash University campuses who can either provide a referral to other counsellors or provide counselling for a fee.

You do not have to return the consent form or the questionnaire or answer every question in the questionnaire. However, because this information will help us clarify the results from the focus groups, completed information is a requirement for participation. If you are having trouble answering any of the questions, you are welcome to ring me on (03) 9903 2672 and I will try to help you. If you need to make an STD call, you can give me your phone number and ask me to call you back.

When commencing focus groups, ground rules will be described which include the request that all information given by participants during the focus groups sessions remains confidential. As you are providing information in a group setting with other participants and the researchers and moderator present, confidentiality cannot be guaranteed for information which you might disclose. Additionally, the focus group will be videotaped and a back-up audiotape used. This is to allow the researchers to transcribe the comments from the focus groups so that we can analyse the information that you and other participants have provided. Additionally, in the transcription, you will be identified by a code number so you will remain anonymous. Only the Chief Investigator, myself and research assistants on this project who are transcribing data will have access to the coded data which will be stored for at least five years as prescribed by the university regulations. The original information will be kept by myself. Access to information that identifies participants will not be available outside this research team. No findings which could identify any individual participant will be published.

If you have any queries or would like to be informed of the research findings from the focus groups, please contact me at Monash University’s Caulfield campus.

<table>
<thead>
<tr>
<th>Should you have any complaint concerning the manner in which this research (Project 2001/190) is conducted, please do not hesitate to contact The Standing Committee on Ethics in Research Involving Humans at the following address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Secretary</td>
</tr>
<tr>
<td>The Standing Committee on Ethics in Research Involving Humans</td>
</tr>
<tr>
<td>PO Box No 3A</td>
</tr>
<tr>
<td>Monash University</td>
</tr>
<tr>
<td>Victoria 3800</td>
</tr>
<tr>
<td>Telephone (03) 9905 2052  Fax (03) 9905 1420</td>
</tr>
<tr>
<td>Email:  <a href="mailto:SCERH@adm.monash.edu.au">SCERH@adm.monash.edu.au</a></td>
</tr>
</tbody>
</table>

Thank you.

Lyn McDonald
Student Researcher
Department of Management
Monash University
Phone: (03) 9903 2672  Fax: (03) 9903 2718  Email: lyn_mcdonald@optusnet.com.au
Appendix 4.6 Informed Consent Form for Posting Out

Informed Consent Form

Project Title: Impact of a company crisis on consumers

I agree to take part in the above Monash University research project. I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records. I understand that agreeing to take part means that I am willing to:

Participate in a focus group and answer questions
Allow the focus group interviews to be videotaped and audiotaped

In addition:
I understand that I will be discussing how a company crisis affects me personally.
I also understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.
I understand that confidentiality cannot be guaranteed for information which I might disclose in the focus group because other participants will be present. I also understand that the researchers will need to employ an assistant to help with transcribing the focus group who will have access to the videotapes and audiotapes. I understand that access to information that identifies me will not be available outside this research team.
I understand that all participants are requested that information given by fellow participants during the focus groups sessions remains confidential.
I understand that Monash University requirements are that this original data or electronically stored copies of the original data will be retained in the Department for at least five years after which it may be destroyed.

Name:..............................................................................................................……………..
(please print)

Signature:........................................................................................................Date ….……..…..

If you wish to participate in the study, please fill out this consent form and include it in the envelope provided and post to us as soon as possible as delays may mean you are not allocated to a focus group.
Appendix 4.7 Demographic Details

4.7.1 Demographic Information Form for Posting Out

Background information

Dear Participant

Thank you for agreeing to become part of the Monash University’s Crisis Research study. We would appreciate some background information about yourself to further help with our research. By providing us with this information, we can organise groups of people who have something in common, therefore making it a more comfortable situation for you. You can choose not to answer this section or return this form to us. If you wish to fill out this form, please include this in the reply paid envelope provided, along with your consent form.

NAME _____________________________________________________________________
ADDRESS _________________________________________________________________
__________________________________________________________________________
PHONE NUMBER __________________________(W) ________________________(H)
BEST TIMES TO PHONE EACH NUMBER
___________________________________________________________________________
___________________________________________________________________________
AGE ______________________________________________________________________
GENDER (please circle one):   Male / Female
EDUCATION LEVEL COMPLETED(please circle one):
primary school/ high school (1-4 years)/ high school (5-6 years)/ diploma/ degree/
post-graduate
MAIN CULTURE YOU SEE YOURSELF AS BELONGING TO (e.g., Australian, English,
Greek, Chinese, Middle Eastern ) ______________________________________________
OCCUPATION ______________________________________________________________

INCOME RANGE (tick one)
$5,000 – 15,000
$15,100 – 25,000
$25, 100 – 35,000
$35,100 – 55, 000
$55,100 – 75,000
$75,100 – 100,000
$100,100 – 150,000
$150,100+
### 4.7.2 Culture Results Based on Hofstede’s (2001) Scores

Scoring: Countries scoring 51 or more are scored as individualist, while those 50 and below are scored as collectivist.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>SCORE</th>
<th>COUNTRY</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>46 = C</td>
<td>Libya</td>
<td>38 = C</td>
</tr>
<tr>
<td>Australia</td>
<td>90 = I</td>
<td>Malaysia</td>
<td>26 = C</td>
</tr>
<tr>
<td>Austria</td>
<td>55 = I</td>
<td>Mexico</td>
<td>30 = C</td>
</tr>
<tr>
<td>Belgium</td>
<td>75 = I</td>
<td>Netherlands</td>
<td>80 = I</td>
</tr>
<tr>
<td>Brazil</td>
<td>38 = C</td>
<td>New Zealand</td>
<td>79 = I</td>
</tr>
<tr>
<td>Canada</td>
<td>80 = I</td>
<td>Nigeria</td>
<td>20 = C</td>
</tr>
<tr>
<td>Chile</td>
<td>23 = C</td>
<td>Norway</td>
<td>69 = I</td>
</tr>
<tr>
<td>Colombia</td>
<td>13 = C</td>
<td>Pakistan</td>
<td>14 = C</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>15 = C</td>
<td>Panama</td>
<td>11 = C</td>
</tr>
<tr>
<td>Denmark</td>
<td>74 = I</td>
<td>Philippines</td>
<td>32 = C</td>
</tr>
<tr>
<td>Egypt</td>
<td>38 = C</td>
<td>Peru</td>
<td>16 = C</td>
</tr>
<tr>
<td>Equador</td>
<td>8 = C</td>
<td>Poland</td>
<td>C</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>27 = C</td>
<td>Portugal</td>
<td>27 = C</td>
</tr>
<tr>
<td>Finland</td>
<td>63 = I</td>
<td>Russia</td>
<td>C</td>
</tr>
<tr>
<td>France</td>
<td>71 = I</td>
<td>Salvador</td>
<td>19 = C</td>
</tr>
<tr>
<td>Germany</td>
<td>67 = I</td>
<td>Saudi Arabia</td>
<td>38 = C</td>
</tr>
<tr>
<td>Ghana</td>
<td>20 = C</td>
<td>Sierra Leone</td>
<td>20 = C</td>
</tr>
<tr>
<td>Great Britain</td>
<td>89 = I</td>
<td>Singapore</td>
<td>20 = C</td>
</tr>
<tr>
<td>Greece</td>
<td>35 = C</td>
<td>South Africa</td>
<td>65 = I</td>
</tr>
<tr>
<td>Guatemala</td>
<td>6 = C</td>
<td>South Korea</td>
<td>18 = C</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>25 = C</td>
<td>Spain</td>
<td>51 = I</td>
</tr>
<tr>
<td>India</td>
<td>48 = C</td>
<td>Sweden</td>
<td>71 = I</td>
</tr>
<tr>
<td>Indonesia</td>
<td>14 = C</td>
<td>Switzerland</td>
<td>68 = I</td>
</tr>
<tr>
<td>Iran</td>
<td>41 = C</td>
<td>Taiwan</td>
<td>17 = C</td>
</tr>
<tr>
<td>Iraq</td>
<td>38 = C</td>
<td>Tanzania</td>
<td>27 = C</td>
</tr>
<tr>
<td>Ireland (Republic of)</td>
<td>70 = I</td>
<td>Thailand</td>
<td>20 = C</td>
</tr>
<tr>
<td>Israel</td>
<td>54 = I</td>
<td>Turkey</td>
<td>37 = C</td>
</tr>
<tr>
<td>Italy</td>
<td>76 = I</td>
<td>United Arab Emirates</td>
<td>38 = C</td>
</tr>
<tr>
<td>Jamaica</td>
<td>39 = C</td>
<td>Uruguay</td>
<td>36 = C</td>
</tr>
<tr>
<td>Japan</td>
<td>46 = C</td>
<td>USA</td>
<td>91 = I</td>
</tr>
<tr>
<td>Kenya</td>
<td>27 = C</td>
<td>Venezuela</td>
<td>12 = C</td>
</tr>
<tr>
<td>Kuwait</td>
<td>38 = C</td>
<td>Yugoslavia</td>
<td>27 = C</td>
</tr>
<tr>
<td>Lebanon</td>
<td>38 = C</td>
<td>Zambia</td>
<td>27 = C</td>
</tr>
</tbody>
</table>
Appendix 4.8 Counselling Information Form Upon Arrival at Group

Counselling information for focus group participants

There is a possibility that some of the crises discussed may have personally affected you or people close to you and that talking about this may bring up distressful memories. Therefore, as a safeguard, if you feel that if you require counselling following tonight's discussion, we can refer you to counsellors at Community Services at any of Monash University campuses who can either provide a referral to other counsellors or provide counselling for a fee.

Monash University’s Community Services counsellors can be contacted on the Monash University campuses at Caulfield campus, next to Caulfield Plaza carpark opposite the Student Union building. Phone (03) 9903 2500.

Free telephone counselling:
Lifeline: Phone 131114
Appendix 4.9 Moderator’s Discussion Guide for Company Crisis Focus Group

Introduction

Thank you very much for agreeing to help out with this research. I am ……., a discussion group moderator and a counsellor working tonight on behalf of Monash University. We have made a commitment to guarantee that everything you say is confidential within the research group. We also ask that any information revealed by participants during this session remains confidential. If at any time you are not comfortable with the proceedings, you are free to leave. We call this a focus group. Let me explain how it works, and then please let me know if something isn’t clear.

This is a discussion, as though you were sitting around just talking. You can disagree with each other, or just comment. We do ask that one person talks at a time, because we videotape the session to save the researchers and myself from having to take notes. Nothing you say will be associated with you or your work. This is just an easy way for us to get some people together.

The subject is company crises. Some of you may have heard about company crises like the Mad Cow disease outbreak or the legionella outbreak at the Aquarium in May last year which killed two people and infected 108 others. Or you may remember the Panadol recalls after contamination with poison. Or the recent Ansett safety crisis with their 767. Today we’re going to talk about company crises. I am going to ask you to share your feelings and thoughts about them.

There is a possibility that some of the crises discussed may have personally affected some of you or people close to you and talking about this may bring up distressful memories. So if any time, you don’t feel comfortable, we will stop proceedings. As a trained counsellor, I am available to assist you tonight. If you feel you require further counselling Monash University’s Community Services Department can provide counselling or make referrals to counsellors. There are also free help lines listed. You have these details on the sheet provided on the table in front of you. Before we start, does anyone have a question? Also, could we switch off any mobile phones, please?

Warm up session

First, I’ll get you to introduce yourselves using your first name only

Let’s go around and talk about any crises you remember and what you remember most about them

Details section
Can you think of any feelings that you had towards the companies involved?
You mentioned experiencing (INSERT FEELING STATE) Now let me ask you about any actions that you took or that you were thinking about taking.

Key content section (emotions, behaviour, emotions as drivers of particular behaviour)
I have a number of different crises listed here which happened to real companies you may know. They are also listed on the sheet in front of you. When we go through each crisis, we’ll be asking the same set of questions. We’ll start with Crisis 1, then I’ll ask questions, then there’s Crisis 2 and so on.

Can you tell me who you think was responsible for the crisis 1 (and so on to crisis 5)
How would this crisis make you feel towards the company?
You mentioned (list emotion), what action would that emotion make you take or make you feel like taking? (And so on through emotion list.)

Now I would like you as a group to talk about the scenarios and discuss what you saw as the differences between each scenario.

Summary
OK, here’s my last question. Is there any information about the topic you would like to add or may have forgotten earlier?
Appendix 4.10 Crisis Discussion Sheet for Moderator

Crisis discussion sheet

Crisis 1

The following is from an SBS TV report (21.1.97): The Shell petroleum company in Nigeria, a country governed by a brutal military dictatorship, holds leases in areas owned by tribespeople. In 1987, following an anti-Shell protest by villagers in the Nigerian Delta, members of the mobile police force, known locally as “kill and go” squads, shot dead two people, raped and beat others and razed half their village to the ground. Three years later a Shell manager specifically requested this same force assist with protests at another village. The squad arrived at 5am and, using machine guns and grenades, massacred villagers while they were sleeping and destroyed many homes.

Crisis 2

Anyone who spent more than six months in Britain between 1980 and 1996 may have been exposed to “mad cow” disease and is banned from donating blood in Australia. The disease is caused by eating beef infected with Creutzfeldt-Jakob disease (CJD) which causes fatal brain degeneration. The disease has a potential 30 year incubation period. Scientists estimate that tens of thousands of people may be affected. This crisis in the British beef industry was thought to be caused by British farmers using feed for their cattle that contained contaminated beef products.

Crisis 3

SmithKline Beecham recalled about 10 million packs of Panadol from sale following a serious extortion threat. The capsules, which the extortionist laced with strychnine, poisoned a 61 year old man and his 54 year old wife. The recall cost the company about $35 million in lost sales alone and could cost the company up to $200 million. The company asked people to return packets or capsules – no matter how old – to their place of purchase for a full refund.

Crisis 4

Kraft recalled various brands of peanut butter across Australia in 1996 following widespread salmonella poisoning of consumers, including children, resulting in one related death of an elderly man. Salmonella causes severe stomach pains, diarrhoea and vomiting. The roasted peanuts shipped to Kraft by a supplier in Kingaroy, Queensland, were contaminated with mouse droppings. Kraft did not check the roasted peanuts for contamination before grinding and bottling. Peanut butter made by Sanitarium and Greens
were also made with nuts supplied by the same company, but because these companies roasted their own nuts, no contamination was found and no recall was conducted.

Crisis 5
Australia’s largest legionella outbreak which killed two people, infected 111 others, many of whom had been hospitalised in a critical condition, was caused by the air-conditioning cooling towers at the Melbourne Aquarium. Symptoms include respiratory problems and pneumonia. Reports suggested the contamination could have been caused by dust from soil disturbed during construction on an adjacent site. The aquarium revealed it had never tested its air-conditioning cooling towers for legionella until after the outbreak was traced there. The building was only four months old.
Appendix 4.11 Definition of Other Variables Identified in the Literature: Message and Source Credibility, Level of Harm, Reputation, Reminder Cues

Message and source credibility

Credibility assessment refers to any attempt to ascertain truthfulness (Yuille, 1989). Message credibility therefore refers to whether the message is perceived as truthful. Source credibility comprises two underlying dimensions: perceived expertise and trustworthiness (Dholakia & Sternthal, 1977; Weiner & Mowen, 1986).

Level of harm

Level of harm refers to the degree of harm that has occurred in relation to a crisis. This includes number and severity of injuries or deaths of people and animals and harm to the environment.

Reputation

Reputation is an overall evaluation of organisational achievements (Fombrun, 1996).

Reminder cues

A reminder cue refers to a wide variety of specific stimuli, cues and contingencies in a consumer’s immediate environment which may function as situational sources of personal relevance (Celsi & Olson, 1988). Repeated media coverage therefore acts as a reminder cue, each time reactivating involvement, as does reminders like discussions with friends.

New code categories: attitudes to media, attitudes to company management, attitudes to government, attitudes to crisis advertising, attitude to management and crisis management

As noted earlier, the review of the data included a number of new variables previously unconsidered in the literature on crises. Their code definitions are listed below.

Dispositional attributions

Dispositional attributions are inferences about the person’s moral character e.g., character inferences of honesty, sincerity and trustworthiness (Weiner, Graham, Peter, & Zmuidinas, 1991).
Attitudes to media

Attitudes are comprised of both affective, cognitive and behavioural components. Attitudes to media therefore comprise an overall evaluation.

Attitudes to company management

This is a global evaluation of company management.

Attitudes to government/regulatory authorities

This is a global evaluation of government (Federal, State or local) and government departments (e.g., Dept. of Health) and regulatory authorities (e.g., Civil Aviation Safety Authority).

Attitudes to crisis advertising

This is a global evaluation of advertising during a crisis.

Attitudes to management

This is a global evaluation of company managers.

Crisis management attitudes

Refers to perceptions of how well the company handled the crisis.
Appendix 4.12 Instructions For Coders On Coding Emotion Sections From Focus Groups

Background information
A series of eight focus groups was held in Melbourne in 2001 for the purpose of investigating the impact of organisational crises on consumer emotions and behaviour.

From the transcriptions of these groups, all the emotional content or possible content has been extracted. Next, using Shaver et al.’s (1987) list of 135 emotion words, I have then grouped these sentences/paragraphs containing emotion words together both under the relevant crisis and under the relevant emotion term. Shaver et al.’s (1987) list was used as it is very comprehensive (although it contains many similar words) and because a review of other emotion lists indicated that too narrow a range of listed emotions.

I only coded up sentences/paragraphs where one of Shaver’s words was used – or a close approximation e.g., pleasure = pleased; vengefulness = retribution

However, this has still left the possible emotional content of some sentences/paragraphs uncoded. These were grouped under the crisis that they referred to e.g., the Ansett Safety Crisis or the One Tel collapse. I have included paragraphs as I believe that sometimes the emotional content of the word may be spread over several sentences.

Please note that the words on Shaver et al.’s (1987) list are nouns like “aggravation” whereas some of the words used by consumers are in the adjective or verb form such as “aggravate” or “aggravated”. These are considered to fall under the term “aggravation”. I have attached the Oxford Paperback Dictionary/Thesaurus definitions of the meanings of the words to help you with the coding. However, some of the words are similar or almost identical in meaning.

Not all the words used by the focus group participants are on the Shaver list, so I have added a very short separate list of emotion words that Richins (1997) found were commonly used by consumers.

Coding instructions:
- I have emailed you a list of emotion words plus a copy of focus group information that requires emotional coding. Please save this as a word document so that you can work on this document and then email it back to me.
• You will be working individually on this project without consultation or discussion with your fellow researcher.
• First, please familiarise yourself with the list of emotion words and their meanings.
• Then, starting at the first numbered sentence/paragraph, please identify in capital letters at the end of each sentence or paragraph the emotion you think best describes it e.g., RELIEF. If you feel there is more than one emotion expressed, please insert all identified emotions e.g., WORRY AND DEJECTION. If you think that different sections refer to different emotions, please insert the identified emotion at the appropriate section. If you feel that the section contains no emotion please insert NO EMOTION.
• Some words may be more cognitive (that is, describing thoughts) than affective (that is, describing feelings). For example, I removed from the list a sentence where the person described themselves as feeling confused, because confusion is a cognitive state.
• If there are some words you would like to check the meaning of, I would prefer you to use the Oxford Dictionary. This can be found on-line and is accessed through the university library website – databases.
• If you have any queries about the coding, please feel free to contact me on 3369 0993 or 0412 827 141.
• After you email your coded copy back to me, I will compare the findings of both researchers. Where there is disagreement, I will act as the adjudicator.
### Appendix 4.13 Elicited Emotion Words in Study 1-Focus Groups

<table>
<thead>
<tr>
<th>Anger</th>
<th>Sadness</th>
<th>Fear</th>
<th>Joy</th>
<th>Surprise</th>
<th>Love</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger, annoyed,</td>
<td>Bad, dejected,</td>
<td>Afraid,</td>
<td>Amused,</td>
<td>Amazement,</td>
<td>Caring,</td>
</tr>
<tr>
<td>bitterness</td>
<td>despair,</td>
<td>alarmed,</td>
<td>calm, content,</td>
<td></td>
<td>compassion</td>
</tr>
<tr>
<td>contempt</td>
<td>disappointment,</td>
<td>anxious,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(cynical),</td>
<td>glum, guilt,</td>
<td>apprehensive,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>despise, disgust,</td>
<td>hopeless,</td>
<td>concerned,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dislike</td>
<td>helpless, hurt,</td>
<td>distressed,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>frustration, fury,</td>
<td>insecure,</td>
<td>frightened,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hate, loathe,</td>
<td>insulted,</td>
<td>horrified,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hostility,</td>
<td>neglected,</td>
<td>nervous,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>irritation,</td>
<td>regret, sad,</td>
<td>panicky,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jealousy, mad,</td>
<td>sorry, suffering,</td>
<td>uneasy,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>outrage,</td>
<td>sympathy,</td>
<td>worried,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>resentment,</td>
<td>unhappy, upset</td>
<td>shock (this was</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>resignation,</td>
<td></td>
<td>“surprise” word</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jealousy,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sceptical, scorn,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vengeful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(punish/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>retaliate,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>retribution),</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>torment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In this section, for each crisis I have tabulated consumer comments explicitly linking attributions regarding crisis cause, emotions, cognitions and behaviour. Arrows indicate stated linkages. For each crisis, responsibility was listed only when explicitly stated, not implied.

### 4.14.1 Ansett Safety Crisis – Planes Grounded

(Arrows denote explicit stated linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Respon-sibility</th>
<th>Emotion (and duration)</th>
<th>Cognition</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG1F1</td>
<td>Cost-cutting</td>
<td></td>
<td></td>
<td></td>
<td>Never fly again – take train</td>
</tr>
<tr>
<td>FG1F2</td>
<td>Annoyed</td>
<td></td>
<td></td>
<td></td>
<td>Avoid flying Ansett</td>
</tr>
<tr>
<td>FG1F3</td>
<td>Poor quality maintenance overseas due to cost-cutting</td>
<td>Ansett</td>
<td>Annoyance à</td>
<td>Over inaction; concern for shareholder profits not passenger safety</td>
<td></td>
</tr>
<tr>
<td>FG1M2</td>
<td>Safety problems</td>
<td>Ansett manager</td>
<td>Contempt, anger à Dislike à</td>
<td>Continuing flying despite safety problem Ansett manager, Geoff Toomey for handling of crisis</td>
<td></td>
</tr>
<tr>
<td>FG1M3</td>
<td>Ansett not doing maintenance; CASA inaction</td>
<td>Ansett CASA</td>
<td>Shock, distress à dread, fear (continuous) Outrage, anger à</td>
<td>After flying Ansett, concerned they could have crashed Lives at stake yet inaction</td>
<td></td>
</tr>
<tr>
<td>FG2F1</td>
<td>Cynical</td>
<td></td>
<td></td>
<td></td>
<td>Would fly Ansett</td>
</tr>
<tr>
<td>FG2F2</td>
<td>Good</td>
<td>Anxious (ongoing)à Unease à</td>
<td>That Ansett honest About maintenance Ads not reassure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG2F3</td>
<td>Good</td>
<td></td>
<td></td>
<td></td>
<td>That Ansett raised maintenance issue</td>
</tr>
<tr>
<td>FG2M1</td>
<td>General degradation of maintenance procedures in aviation industry over time</td>
<td>CASA - partially</td>
<td>Pride Annoyance à Unease à</td>
<td>Ansett honest about problems Towards CASA - Ansett as scapegoat Problem not solved</td>
<td></td>
</tr>
<tr>
<td>FG2M2</td>
<td>Fond</td>
<td></td>
<td></td>
<td></td>
<td>“Airlines in Australia as good as it gets”.</td>
</tr>
<tr>
<td>FG2M3</td>
<td>Ansett slashing maintenance due to cost-cutting in competitive market</td>
<td>Uncertain - Ansett, Boeing &amp; CASA</td>
<td>Unsurprised alarm Annoyed à</td>
<td>About safety problems Over Ansett ad campaign</td>
<td></td>
</tr>
<tr>
<td>FG2M4</td>
<td>General maintenance problem in aviation industry</td>
<td>CASA à Media à</td>
<td>Contempt, fury à vengeful Angry à</td>
<td>Abdicated responsibility; Ansett as scapegoat For creating fear (story beat up)</td>
<td></td>
</tr>
<tr>
<td>FG2M5</td>
<td>Lack of maintenance</td>
<td>Ansett</td>
<td>Anger (continuing) nervou, Angry, Angry</td>
<td>Safety risk</td>
<td>Not fly Ansett</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------</td>
<td>--------</td>
<td>-----------------------------------------</td>
<td>------------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Manager lied about when planes back in air</td>
<td>Could have spent ad campaign money on maintenance</td>
<td></td>
</tr>
<tr>
<td>FG3F1</td>
<td></td>
<td></td>
<td>Disappointed, dislike</td>
<td>As let down by Ansett</td>
<td></td>
</tr>
<tr>
<td>FG3M1</td>
<td>Safety regulation problems</td>
<td>Ansett manager</td>
<td>Disgust, anger, vengefulness, dislike</td>
<td>“Take them out and shoot them”</td>
<td></td>
</tr>
<tr>
<td>FG3M3</td>
<td>Ansett not thorough</td>
<td>Ansett</td>
<td>Unsympathetic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG3M4</td>
<td>Safety regulation problem reported by Ansett technician</td>
<td>CASA</td>
<td>Disgust, dislike</td>
<td>For CASA blaming Ansett</td>
<td></td>
</tr>
<tr>
<td>FG4M2</td>
<td>Conspiracy</td>
<td></td>
<td>Qantas still flying and use same staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG4M4</td>
<td>Privatisation &amp; self-regulation in airline industry with cost-cutting</td>
<td></td>
<td>People taking chances flying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG5F3</td>
<td>Compassion</td>
<td></td>
<td>For Ansett as other airlines in as bad a state About ads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG5M2</td>
<td>General on-going maintenance problem in airline industry Profits not safety focus</td>
<td>Ansett</td>
<td>Annoyance Unease</td>
<td>Problems routine with all airlines Ads create reminder effect that planes may crash</td>
<td>Fly Qantas (habit)</td>
</tr>
<tr>
<td>FG6F2</td>
<td>Maintenance reduction in airline industry due to cost-cutting: Deregulation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG6F5</td>
<td>Maintenance cost-cutting due to competition</td>
<td>Ansett</td>
<td>CEO</td>
<td>CEO uncaring, so long as get a big salary</td>
<td></td>
</tr>
<tr>
<td>FG6M1</td>
<td>Poor o’seas maintenance due to cost-cutting; Not following regulations Deregulation</td>
<td>Ansett</td>
<td></td>
<td>CASA maintenance under pressure to let 737s back in air</td>
<td></td>
</tr>
<tr>
<td>FG6M2</td>
<td>Responsible for ensuring airlines do their job</td>
<td>CASA</td>
<td></td>
<td>Still frequent flyer on both Dinner party talk</td>
<td></td>
</tr>
<tr>
<td>FG7F1</td>
<td>Maintenance problems in airline industry and CASA as regulator</td>
<td>Joint: CASA &amp; media for grounding Ansett for maint’nce</td>
<td>Very angry Distress Very angry Disgust</td>
<td>CASA’s grounding planes affected two plans; CASA’s witch hunt for Ansett as Qantas also have problems With CASA</td>
<td></td>
</tr>
<tr>
<td>FG7F2</td>
<td>Media</td>
<td></td>
<td>Crisis manufactured by media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7F3</td>
<td>Systemic problems in airline industry with cost-cutting CASA not regulating</td>
<td>Dislike, annoyed</td>
<td>Because they are cheapest &amp; small risk; Ads; money better spent on maintenance</td>
<td>Flying Ansett</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>FG7F4</td>
<td>Deregulation not enforcing regulations CASA</td>
<td>Govt.</td>
<td>When safety issues emerged Of Ansett due to previous personal problem That name dragged through mud That Ansett hounded With media bias</td>
<td>Fly Qantas (habit) Occasional Ansett (unchanged) Discussed with friends and fellow travellers</td>
<td></td>
</tr>
<tr>
<td>FG7M1</td>
<td>Safety problems in airline industry Ansett managers</td>
<td>Glad &amp; Dislike &amp; Vengefulness, glad &amp; satisfaction Upset, compassion Disappointed (all continuing)</td>
<td>Poor crisis handling Self-inflicted; Also problem with Qantas Live under a flight path</td>
<td>Considering flying Virgin Blue</td>
<td></td>
</tr>
<tr>
<td>FG7M2</td>
<td>Safety problems Ansett Ansett</td>
<td>Sorry</td>
<td>For Ansett being condemned and penalised severely</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7M3</td>
<td>Safety problems Ansett Ansett</td>
<td>Irritation &amp; Contempt &amp; Fear (all continuing)</td>
<td>Falsification of safety records emerged For stranded travellers Not supplying updated maintenance instructions</td>
<td>Fly Qantas (habit)</td>
<td></td>
</tr>
<tr>
<td>FG7M4</td>
<td>Technical supervisory problems Ansett Boeing managers</td>
<td>Pleased &amp; Sympathy (short-term)</td>
<td>Self-inflicted Planes grounded, so safe For maintenance employees</td>
<td>Not fly with Ansett (habit)</td>
<td></td>
</tr>
<tr>
<td>FG7M5</td>
<td>Maintenance problem in airline industry due to cost-cutting Deregulation CASA (but not as much as Ansett) Ansett managers</td>
<td>Contempt &amp; Glad &amp; Sympathy &amp; Unease &amp; Sorry &amp;</td>
<td>No watchdog overseeing For inconvenienced customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG8M2</td>
<td>Nervous, fear Worry (for a while)</td>
<td>Because he has to fly; “We’re punters at the moment”</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 4.14.2 Legionella Crisis at the Melbourne Aquarium and the Alfred Hospital

(Arrows denote explicit stated linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Responsibility</th>
<th>Emotion and duration</th>
<th>Cognition</th>
<th>Behaviour - company directed - crisis-coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGF1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG1F2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG1F3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG1F4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG1M2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG1M3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG1M4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG2F1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG2F2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FGF1**

- *Group*: Attribution of crisis cause
- *Responsibility*: Company directed
- *Emotion and duration*: Horrified, angry à shock, unhappy. Duration: 1 month
- *Cognition*: Subjected grandkids to à legionella at Aquarium
- *Behaviour*: Stayed away; no action

**FG1F2**

- *Aquarium (Aqua’m)*
- *Health Dept.*
- *Doctor*
- *Emotion and duration*: Fear, anger à Neglect, annoyed à Disappointment à Distressed à
- *Cognition*: Legionella sufferer: thought she was dying at one stage
- *Behaviour*: Part of class action lawsuit; Never been back and won’t; Seeing immune specialist

**FG1F3**

- *Aquarium (Aqua’m)*
- *Health Dept.*
- *Doctor*
- *Emotion and duration*: Angry, annoyed à unease Duration: 1 month
- *Cognition*: Undermined belief in govt; Under chemotherapy & almost visited Aquarium so danger potential
- *Behaviour*: Trusted Aquarium, but let down

**FG1M2**

- *Aquarium (Aqua’m)*
- *Health Dept.*
- *Emotion and duration*: Surprise disappointment
- *Cognition*: Health Dept. have a lot to answer for

**FG1M3**

- *Health Dept.*
- *Emotion and duration*: Worry, fear à Fear à
- *Cognition*: Had some symptoms à In other buildings
- *Behaviour*: Spoke to Health Dept. (cc)

**FG1M4**

- *Legionella general (general)*
- *Health Dept.*
- *Consum er*
- *Emotion and duration*: Anger initially à Satisfied à Apprehension, à distress (constant)
- *Cognition*: Dies down because can do nothing
- *Behaviour*: “Could not drag me to the Alfred” hospital

**FG2F1**

- *Self-regulation of cooling tower maintenance leading to lack*
- *Emotion and duration*: Relief à Fear for self and population
- *Cognition*: That son didn’t catch after Aquarium visit
- *Behaviour*: Not visit Aquarium Has visited Alfred and would again

**FG2F2**

- *Self-regulation of cooling tower maintenance leading to lack*
- *Emotion and duration*: Very insulting à (continuing)
- *Cognition*: People not told of risk With another issue wrote a letter to editor, contacted PR person but nil result
- *Behaviour*: Inaction
| FG2F3 | Maintenance of water cooling towers  
Pervasive environmental factors  
Building projects stirring up dust | Extreme anger  
V. very frustrated  
Disgust  
Covering up health risk  
Violation of trust – rely on hospitals to safeguard health  
Regarding own and others’ apathy about demanding change | Inaction |
| FG2M1 Alfred | Lack of regular quality control procedures  
Environmental changes  
Politician’s lack of expertise in health portfolio | Self  
Govt.  
V. very frustrated  
Disgust  
Because on-going crises  
Because not told of risk and people also not check out health after Alfred contact  
For not following up cause  
In charge to ensure things get done | Inaction |
| FG2M3 | Climate contributing factor |  |  |
| FG2M4 Alfred | Cynicism  
Because on-going crises  
Because not told of risk and people also not check out health after Alfred contact  
For not following up cause  
In charge to ensure things get done | Inaction |
| FG2M5 | Source unknown, bad luck |  |  |
| FG4F3 | Pervasive in environment | Fear  
Relief  
For friend there at time  
That she was OK |  |
| FG4F4 | Systems fault  
Aqua’m | Annoy  
Took overseas friends to Aquarium  
Phone to warn them (cc)  
Inaction: phone bill claim not worth effort |  |
| FG5F1 | Pervasive in environment |  |  |
| FG5F2 | Sympathy  
For person hammered making media statement  
Off going to Aquarium for a while |  |  |
| FG5F3 | Perhaps more testing needed  
Depressed  
Apprehensive  
Aqua’m now associated with Legionella  
Trust violation  
Never visit again |  |  |
| FG5M2 | Scared, relief  
Visited Aquarium at time, but did not catch legionella |  |  |
| FG6F2 Aqua’m | Aquarium handled crisis well  
Would think twice about going, but |  |  |
| FG6F3  | General Aq | Fear (strong)  | v.v.scary | “You don’t really know which place is next” | Tested for Legionella (cc) “Never go back again” |
| FG6F5  | Aq         | Outrage       |          | “It could have been my little sister”       |                                              |
| FG6M1  |            | Maintenance   | not done on schedule (general) | Cost-cutting (general) | Visited Aquarium after crisis |
| FG6M2  |            | Pervasive in environment | Fear (Alfred) | Surprise (Aq) | That Mum hasn’t caught it That happened so soon after opening |
| FG7F2  | Aq         | Random event  |          | Daughter & mother there but OK              |                                              |
| FG7M3  |            | Worry         |          | Near Aquarium & Alfred                      |                                              |
### 4.14.3 Panadol and Herron and Paracetamol Crises

(Arrows denote explicit stated linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Responsibility</th>
<th>Emotion (and duration)</th>
<th>Cognition</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG3M1</td>
<td>Sabotage à Saboteur</td>
<td>Liking for/pride in Herron</td>
<td>Respect for Herron as they reacted quickly and well; Earned corporate brownie points</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG3M3</td>
<td></td>
<td>Sympathy à</td>
<td>For company (Panadol) as innocent party</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG5F1</td>
<td>Extortion à Extortionist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG5F3</td>
<td>Worry à Relie</td>
<td></td>
<td>If your child is sick Ads reassured</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG5M2</td>
<td>Extortion à Extortionist</td>
<td>Dislike à Liking à</td>
<td>Extortionist “evil” Responsible company with recall; brilliant ad campaign</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG6F3</td>
<td></td>
<td></td>
<td>Returned Panadol (cc) Switched to Panamax (cheaper)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG6F4</td>
<td>Unease à</td>
<td></td>
<td>Didn’t know which brands affected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG6M1</td>
<td></td>
<td></td>
<td>Bought alternate brand during recall (cc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7F1</td>
<td>Extortion à Extortionist</td>
<td>Alarm à Disappointment à for them, sympathy (continuing) Sympathy à</td>
<td>When crisis hit For Panadol because of brand damage through no fault of own; additional costs for tamper-proofing, advertising For self and other consumers because difficult to find liquid substitute</td>
<td>Returned goods, didn’t ask for refund; (cc) Discussed crisis with friends Look for substitute during crisis (cc) Still buy</td>
<td></td>
</tr>
<tr>
<td>FG7F2</td>
<td>Concern à Insecure à</td>
<td></td>
<td>For children because few substitutes for Panadol drops; Vulnerable because may need it for kids</td>
<td>Returned Panadol drops to chemist; Switched to Amcal substitute (permanent)</td>
<td></td>
</tr>
<tr>
<td>FG7F3</td>
<td>Sorry à</td>
<td></td>
<td>For company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7M1</td>
<td></td>
<td></td>
<td>Fatalistic as chances of getting tampered product low Bought a substitute product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7M2</td>
<td>Extortion à Extortionist</td>
<td>Disappointed à Disappointed à Alarmed (1-2months)</td>
<td>Herron &amp; Panadol didn’t go public with information before recall; product should be tamper proof That media not release info While product off shelf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7M3</td>
<td>Anger à</td>
<td></td>
<td>With extortionist because more (tamper-proof) packaging to struggle through &amp; affects environment Packaging makes product safe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7M4</td>
<td>Blackmail by extortionist</td>
<td>Insecure à Sympathy à</td>
<td>Community vulnerable to tampering with any product For company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extortion-ist</td>
<td>Anger</td>
<td>Annoying</td>
<td>“Nasty creature…who should be hung, drawn and quartered”</td>
<td>Having to put product behind supermarket counter</td>
<td>Discussed with supermarket staff</td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
<td>---------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>FG8F1</td>
<td>Content, relief</td>
<td>Insecure</td>
<td>Trusts the new packaging</td>
<td>Any product could be tampered with</td>
<td>Didn’t hear of recall so kept using children’s drops; After hearing of recall used for self</td>
</tr>
<tr>
<td>FG8M1</td>
<td>Extortion</td>
<td>Extortion</td>
<td>Sympathy</td>
<td>Annoying, concern</td>
<td>For Herron because immediate sales loss</td>
</tr>
<tr>
<td>FG8M2</td>
<td>Scared</td>
<td>Angry, upset, fear</td>
<td>That didn’t have enough information due to poor English</td>
<td>Because a medicine and on prescription, so little choice</td>
<td>Followed the news</td>
</tr>
</tbody>
</table>
### 4.14.4 McDonald’s McMatch and Win

(Arrows denote explicit stated linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Responsibility</th>
<th>Emotion (and duration)</th>
<th>Cognition</th>
<th>Behaviour - company directed crisis-coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG6F1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Entered contest, but not a winner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Still enter contest</td>
</tr>
<tr>
<td>FG6F2</td>
<td>McDonald</td>
<td></td>
<td>Disgust</td>
<td>Can’t win against McDonald’s; typical of a big corporation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disappointed</td>
<td>No mediation; people got nothing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Annoyed</td>
<td>So many people can’t be wrong</td>
<td></td>
</tr>
<tr>
<td>FG6F3</td>
<td>McDonald’s made mistake with tickets</td>
<td>McDonalds, not the public</td>
<td>Annoyed (at time)</td>
<td>They’re big business – people not important; Cheating people</td>
<td>Inaction</td>
</tr>
<tr>
<td>FG6F5</td>
<td>McDonald’s mistake in not stating couldn’t use previous tickets or made too many winning tickets</td>
<td>McDonalds</td>
<td>Shock</td>
<td>That McDonald’s won court case &amp; gloated; Unfair;</td>
<td></td>
</tr>
<tr>
<td>FG6M1</td>
<td>McDonald’s made mistake with tickets</td>
<td>McDonalds</td>
<td>Bitter</td>
<td>McDonald’s greedy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disgust</td>
<td>That McDonald’s completely wrong - winners genuine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surprise</td>
<td>That McDonald’s won case</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amazed, disappointed</td>
<td>At what big companies do</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dejected</td>
<td>That protests wouldn’t matter</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Apprehensive (all ongoing)</td>
<td>Lack of trust, sceptical re other competitions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Liking</td>
<td>For McDonald’s</td>
<td></td>
</tr>
<tr>
<td>FG6M2</td>
<td>Company making tickets reused old stock</td>
<td>Company making tickets</td>
<td>Sorry</td>
<td>For people who won but did not get prizes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Liking</td>
<td>For McDonald’s</td>
<td></td>
</tr>
<tr>
<td>FG7F1</td>
<td>Problem tickets may have been genuine</td>
<td>McD’ldsÌå</td>
<td>Surprise</td>
<td>That didn’t settle it as good will gesture;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disappointment</td>
<td>Problem so trivial</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Responsible to ensure tickets correct</td>
<td></td>
</tr>
<tr>
<td>FG7F2</td>
<td>Bitter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7F3</td>
<td>Bitter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7M3</td>
<td>Bitter, disgust</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG7M5</td>
<td>McDonald management: CEO &amp; board</td>
<td></td>
<td>Anger</td>
<td>Stupidly upset the public</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surprise</td>
<td>That denied &amp; took it to court</td>
<td></td>
</tr>
</tbody>
</table>

(Conflicting statements)
### 4.14.5 Esso Gas Crisis Caused by Gas Explosion at Longford Plant

(Arrows denote explicit stated linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Responsibility</th>
<th>Emotion (and duration)</th>
<th>Cognition</th>
<th>Behaviour - company directed - crisis-coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG1M2</td>
<td>Cutting à corners to make profits</td>
<td>Esso</td>
<td>Anger</td>
<td>Blaming worker</td>
<td></td>
</tr>
<tr>
<td>FG2F1</td>
<td>Lack of maintenance &amp; safe systems</td>
<td>Anger, Disappointment, Contempt</td>
<td>Lack of environmental responsibility with gas wastage</td>
<td>Organising showers/ cooking for others (cc)</td>
<td></td>
</tr>
<tr>
<td>FG2F2</td>
<td>Anger for duration à and after</td>
<td>Because of scapegoating dead employees and impact on sick and elderly</td>
<td>Lack of maintenance in area à</td>
<td>Disconnected gas</td>
<td></td>
</tr>
<tr>
<td>FG2F3</td>
<td>Profits before care</td>
<td>Worry à, Insecure à</td>
<td>For older people with gas only</td>
<td>Checked if neighbours OK</td>
<td></td>
</tr>
<tr>
<td>FG2M1</td>
<td>Poor quality control</td>
<td>Frustration, annoyed, resignation, disappointment</td>
<td>You expect things to work</td>
<td>Privatisation of companies</td>
<td></td>
</tr>
<tr>
<td>FG2M2</td>
<td>Surprise à</td>
<td>At company for those killed; for scapegoating</td>
<td>Inaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG2M3</td>
<td>Lack of regulations à Privatisation, so shareholder profit focus For selling utility à to Exxon</td>
<td>Anger à, Resignation à, Insult à</td>
<td>At company for those killed; for scapegoating Must put up with crisis conditions Govt. spin of “jolly good fun”</td>
<td>Considering self-sufficiency and has investigated Used BBQ, kettle (cc)</td>
<td></td>
</tr>
<tr>
<td>FG2M4</td>
<td>Monopoly as potential alternate supplier not allowed to drill for gas à</td>
<td>Frustrated Anger à</td>
<td>Can’t do anything Scapegoats à</td>
<td>Inaction</td>
<td></td>
</tr>
<tr>
<td>FG2M5</td>
<td>Company profit making</td>
<td>Amused, Cynical, Resentful à</td>
<td>Not much affected: saw it as a bit of an adventure Duration of cold showering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG3M4</td>
<td>Esso</td>
<td>Esso negligent. People should go to jail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG3M5</td>
<td>Esso</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG4F1</td>
<td>Esso</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG4F3</td>
<td>Esso</td>
<td>“Nice stuff happening between people” Esso scapegoating employees; union bashing by government Regarding government forcing gas disruption payout</td>
<td>Still buy Esso fuel because fear of toluene in others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG4F4</td>
<td>Economic rationalism</td>
<td>Worry, panic à</td>
<td>Not know how to turn off gas pilot light and fear of fine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>---------------------</td>
<td>---------------</td>
<td>----------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enjoyment à</td>
<td>Socialising during crisis</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hopeless à</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jealous à</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annoyed à</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Insulted à</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG4M1</td>
<td></td>
<td>Hopeless à</td>
<td>Of people with all-electric house</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jealous à</td>
<td>Out of routine, 3rd world status</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annoyed à</td>
<td>Token power refund</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sad à</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(for crisis duration)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG4M2</td>
<td></td>
<td>Helpless à</td>
<td>Esso “bunch of liars”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annoyed à</td>
<td>Not much you can do</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sad à</td>
<td>Out of routine, couldn’t shower</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(for crisis duration)</td>
<td>That dependent on gas - vulnerable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG4M3</td>
<td>Poor maintenance</td>
<td>Esso economics</td>
<td>Esso tried to blame dead workers; Friends in danger of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Getting rid of Keynesian economics</td>
<td></td>
<td>being blamed; Lying to the public to cover themselves;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Esso &amp; marketer</td>
<td>treatment of maintenance staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annoyed à</td>
<td>Phoned union to get a letter of support sent to Esso</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(continuing)</td>
<td>workers; Don’t purchase Esso fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cynical à</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(continuing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG4M4</td>
<td>Privatisation ß</td>
<td>Economists &amp; rationalists</td>
<td>Like a 3rd world country</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Privatisation à</td>
<td></td>
<td>Expect failures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vote government out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG6F1</td>
<td></td>
<td>Annoyed</td>
<td>Disruptive to everybody</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Had to shower elsewhere (cc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG6F4</td>
<td>Deregulation</td>
<td>Exxon</td>
<td>Dangerous to bathe kids</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Esso parent co)</td>
<td>Govt (Premier’s) comments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG6F5</td>
<td>Esso</td>
<td>Scorn à</td>
<td>Govt (Premier’s) comments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG6M2</td>
<td>Esso</td>
<td>Scorn à</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>with Exxon as parent co</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG8F1</td>
<td>Drunk à workers</td>
<td>Disgust</td>
<td>Govt acted quickly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG8M1</td>
<td></td>
<td>Annoyed</td>
<td>Bought electric heaters as back-up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG8M2</td>
<td>Restructuring gas system</td>
<td>Shock à</td>
<td>Like a third world event; Govt. should do something</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG8M3</td>
<td></td>
<td>Frustration à</td>
<td>Went to parents’ house to wash and cook</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 4.14.6 Kraft Crisis – Salmonella in Peanut Butter

(Arrows denote explicit stated linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Responsibility</th>
<th>Emotion (and duration)</th>
<th>Cognition</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG3M1</td>
<td>Failed safety regulation</td>
<td>Kraft manage -ment</td>
<td>Company should provide clean food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG3M2</td>
<td>Quality control problem</td>
<td>Kraft</td>
<td>Shouldn’t happen</td>
<td>Handled crisis well; accepted responsibility</td>
<td></td>
</tr>
<tr>
<td>FG3M4</td>
<td>Self-regulation and poor quality control</td>
<td>Kraft</td>
<td>Forgot crisis until mentioned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG4F2</td>
<td>Quality control problem</td>
<td>Kraft</td>
<td>About whether to buy again due to health risk</td>
<td>No repurchase of any peanut butter</td>
<td></td>
</tr>
<tr>
<td>FG4F3</td>
<td>Lack of health inspectors</td>
<td>Kraft</td>
<td>Because her kids ate it</td>
<td>Returned jar for refund</td>
<td></td>
</tr>
<tr>
<td>FG4F4</td>
<td>Poor quality control, lack of health inspectors and possibly environmental conditions</td>
<td>Kraft</td>
<td>When cause identified</td>
<td>Boycott product (permanent)</td>
<td></td>
</tr>
<tr>
<td>FG4M1</td>
<td></td>
<td>Kraft</td>
<td>Inconvenient</td>
<td>Threw jar in bin</td>
<td></td>
</tr>
<tr>
<td>FG4M2</td>
<td></td>
<td>Kraft</td>
<td>Only money back for jar, not for time, car costs, pollution</td>
<td>Repurchased after crisis</td>
<td></td>
</tr>
<tr>
<td>FG4M4</td>
<td></td>
<td>Kraft</td>
<td>Returned jar; No longer buy because not Australian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG5F1</td>
<td>Bad luck Quality procedures</td>
<td>Kraft</td>
<td>For Kraft in unfortunate incident</td>
<td>No repurchase of any peanut butter (was regular buyer)</td>
<td></td>
</tr>
<tr>
<td>FG5F2</td>
<td>Quality procedures</td>
<td>Kraft</td>
<td>Towards company about products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG5F3</td>
<td>Dislike</td>
<td>Phillip Morris</td>
<td>Never purchases peanut but buys Kraft Vegemite</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Inform flatmates of company association
Reduce Vegemite use - spread thinner on toast
| FG5M2 | Quality procedures | Kraft employee | Unsurprised à Disgust à Disgust à Sceptical à | Things go wrong Towards Phillip Morris as à profiteering for death Association between cheese à & cigarette ash; Because Kraft a subsidiary of Phillip Morris Phillip Morris supporting social cause | Boycott Phillip Morris Boycott Kraft products |
| FG8F1 | Salmonella in product | Kraft | Annoyed à Mild fear à Love à | Couldn’t have on toast à Risk when repurchase Kraft Product | During crisis sampled alternative, disliked taste, stopped buying. After crisis repurchased Kraft |
| FG8M1 | From memory – extortion Salmonella à | Kraft | à Mild annoyance à (a few weeks) Unconcerned now Sympathy à | Not remember company For not having peanut butter à because gave up regular brand although not a Kraft eater For company because losing millions | Avoided all peanut butters for some time |
| FG8M2 | | | Annoyed à Upset, nervous à Scared à Content à | Due to lack of choice à Waited several weeks after product re-launch to see if any others becoming ill à Recovered well; Still trust them | Bought alternative Repurchased Kraft |
| FG8M3 | | | Hate à No emotion à | Peanut butter & so don’t eat it Crisis not relevant | |
### 4.14.7 Mad Cow Disease

(Arrows denote explicit stated linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Respon-sibility</th>
<th>Emotion (and duration)</th>
<th>Cognition</th>
<th>Behaviour - company directed - crisis-coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG2M3</td>
<td></td>
<td></td>
<td>Contempt à</td>
<td></td>
<td>Stopped eating beef in England</td>
</tr>
<tr>
<td>FG6F2</td>
<td>Can’t blame farmers</td>
<td></td>
<td>Not affected by crisis</td>
<td></td>
<td>Checked back of label or tins in supermarket</td>
</tr>
<tr>
<td>FG6F4</td>
<td>Thought it safe to feed sheep by-products to cows &amp; that disease not passed onto humans; Deregulation of industry; Govt. not acting faster &amp; encouraging continued eating, covering-up rather than losing trade Not caring about Commoners; For ridiculing scientists who thought beef unsafe Method of slaughtering</td>
<td>Scientists/ biologists Govt. Upper class decision-makers Media Slaughter houses</td>
<td>Scared, worried à V. angry (still)à Hopelessness, frustration, concern à Scared à</td>
<td>Lived in England at the time of contamination; family laughing stock. With government handling: reassuring people, Minister feeding beef to child on TV; English so gullible That immunisations imported from England are contaminated Cultural belief that “British beef is best”</td>
<td>Stopped eating beef in England &amp; products suspected to have beef by-products e.g., lard, gelatine No action taken after return to Australia</td>
</tr>
<tr>
<td>FG6F5</td>
<td>For deregulating English govt.</td>
<td></td>
<td>Worry à Concern à Scary à</td>
<td>Symptoms may emerge in future “It’s as if nothing’s safe” That removed products now safe That baby foods had to be withdrawn from shelves</td>
<td>Mum not buy English beef products; Working at supermarket removed items with British beef by-products; Threw out same products at home; Read labels</td>
</tr>
<tr>
<td>FG6M1</td>
<td>Farmer maximising profit, allowing contaminated products into Australia as forewarned Responsibility to ensure product safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>British govt. &amp; dept. Australian customs Supermarket</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relief  à  Caring  à  Apprehensive  à  Worry, fear  à  Sympathy  à  Amazement  à  Not surprised  à</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lucky we live in Australia Protective of Australian industry Need to be careful of purchases, still dangerous; Lack of information about beef by-product sources in food With English beef by-products in food could get sick in 10 years For people affected by it That people allowed this feed “Some greedy bugger can save money this way”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wouldn’t buy products that believed had English beef in them: checking labels Avoid visiting England</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG6M2</td>
<td>Optimistic  à  That fears are an over reaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG8M3</td>
<td>Stopped buying Hungarian tinned goulash</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 4.14.8 Nike Sweat Shops (Arrows Denote Explicit Stated Linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Responsibility</th>
<th>Emotion (and duration)</th>
<th>Cognition</th>
<th>Behaviour - company directed - crisis-coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG8F1</td>
<td>Nike ruthless, profit-oriented Because buying encourages behaviour For allowing practices</td>
<td>Nike (most) Customers Govt.</td>
<td>Disappointed, à amazed</td>
<td>Not ethical practices.</td>
<td>Intends to tell her friends and to boycott; but doesn’t buy anyway because too expensive</td>
</tr>
<tr>
<td>FG8M1</td>
<td>Greed No real β regulations For β buying</td>
<td>Nike 90% senior mgmt Govt. Customers</td>
<td>Mild anger à (ongoing)</td>
<td>Exploiting workers; could afford to pay more as making huge profits</td>
<td>Inaction – doesn’t buy shoes anyway</td>
</tr>
<tr>
<td>FG8M3</td>
<td>Greed Image partly responsible</td>
<td>Nike à</td>
<td>Anger, frustration (ongoing) à</td>
<td>Nike sweatshop conditions not ethical; Top company so it’s as if it doesn’t matter to them</td>
<td>Stopped buying Nike tennis shoes</td>
</tr>
<tr>
<td>FG5F1</td>
<td>Greed</td>
<td>Nike, Govt. (a little)</td>
<td>Not surprised, unhappy</td>
<td>Profit at expense of everyday person; Not illegal but unethical Offensive</td>
<td>May still buy Nike</td>
</tr>
<tr>
<td>FG5F2</td>
<td>Search for cheaper production</td>
<td></td>
<td>Annoyed, irritated (ongoing); frustration increased over time</td>
<td>Topic raised in class; 12 year old kids working for Nike.</td>
<td>Talked about it with fellow students Would information search if faced with deciding on Nike product</td>
</tr>
<tr>
<td>FG5F3</td>
<td>No conscience</td>
<td>Nike - managers</td>
<td>Disappointment à Frustration à V. disgusted à Contempt; Frustration à Disappointment à (All on-going)</td>
<td>Lack of corporate responsibility in treatment of workers Lack of change in practices; Company as liars – Nike told employees couldn’t afford to pay more Completely unethical β Hypocritical: multi-millions spent promoting “tick” yet exploit workers Athletes promote Nike</td>
<td>Refuses to buy; Encourages others to not buy Searched internet: found Nike refused to sign “no sweatshop” policy</td>
</tr>
<tr>
<td>FG5M1</td>
<td></td>
<td></td>
<td></td>
<td>Big corporations’ business à practises exploiting workers (but also because less fashionable)</td>
<td>Changed brands</td>
</tr>
<tr>
<td>FG5M2</td>
<td>Nike</td>
<td>Disappointment à Frustration Disappointment à Contempt à</td>
<td></td>
<td>With humanity using slave ß labour &amp; because less in fashion Athletes like Cathy Freeman promoting Nike; Looks down on Nike wearers</td>
<td>Refuses to buy;</td>
</tr>
</tbody>
</table>
### 4.14.9 Ford Pinto

(Arrows denote explicit stated linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Resposibili ty</th>
<th>Emotion (and duration)</th>
<th>Cognition</th>
<th>Behaviour - company directed - crisis-coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG3F1</td>
<td>Ford</td>
<td></td>
<td>Hopelessness</td>
<td>No choice but to trust company Ford culture to bury mistakes</td>
<td></td>
</tr>
<tr>
<td>FG3M1</td>
<td>Ford ignoring problem</td>
<td>Ford</td>
<td>Outrage, Disgust</td>
<td>Ford announced to press it was cheaper to let people die Only came clean when it was going to cost them too much money</td>
<td></td>
</tr>
<tr>
<td>FG3M2</td>
<td>Ford</td>
<td>Contempt</td>
<td>Cover-up attitude to mistakes part of company culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG3M3</td>
<td>Ford</td>
<td></td>
<td>Ford could not be trusted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG3M4</td>
<td>Ford</td>
<td>Uneasy</td>
<td>About other manufacturers’ cars Ford buries mistakes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG3M5</td>
<td>Ford ignoring fuel line problem</td>
<td></td>
<td>Outrage, disgust, Revulsion, annoyed Unease, disgust, Displeasure, Hopelessness (feelings permanent)</td>
<td>Cheaper to allow a few people to die. Life less important than $. Ford cannot be trusted Early recall would have changed feelings towards company. What can you do? The “Ford Molotof”</td>
<td>Not buy Ford</td>
</tr>
</tbody>
</table>
### 4.14.10 Nestlé Infant Formula Crisis

(Arrows denote explicit stated linkages)

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Attribution of crisis cause</th>
<th>Responsibility</th>
<th>Emotion (and duration)</th>
<th>Cognition</th>
<th>Behaviour - company directed - crisis-coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG5F1</td>
<td>Nestlé &amp; Govt. including health authorities</td>
<td>Disgust, surprise</td>
<td>Before focus group had no knowledge of crisis</td>
<td>Intends to boycott Nesquick &amp; Milo</td>
<td></td>
</tr>
<tr>
<td>FG5F2</td>
<td></td>
<td>Disgust</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG5F3</td>
<td>Marketing – knew consequences</td>
<td>Nestlé</td>
<td>Outrage</td>
<td>Because of crisis involving infant milk powder</td>
<td>Won’t buy any Nestlé products (permanent)</td>
</tr>
<tr>
<td>FG5M1</td>
<td></td>
<td>Surprise</td>
<td></td>
<td></td>
<td>Stopped buying Nestle products until forgot association</td>
</tr>
<tr>
<td>FG5M2</td>
<td>Nestlé</td>
<td>Sympathy</td>
<td>Frustration, disgust</td>
<td>Because baby milk action group won’t ever give up on Nestle</td>
<td>Checked web site of boycott group Doesn’t buy Nescafe but will drink it Turned down a Nestlé sponsorship for union at Uni</td>
</tr>
</tbody>
</table>
### Appendix 4.15 Boycott/Avoidance and Emotion Linkages

<table>
<thead>
<tr>
<th>Crisis</th>
<th>Participant</th>
<th>Emotions category and emotion words</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esso</td>
<td>FG4M3</td>
<td>Anger (annoyed, cynical) – continuing</td>
<td>Ongoing fuel boycott</td>
</tr>
<tr>
<td>Legionella</td>
<td>FG1F2</td>
<td>Anger (strong anger, annoyed)</td>
<td>Ongoing avoidance of Aquarium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear (fear, distressed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sad (neglect, disappointment)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FG1M4</td>
<td>Anger - initially</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear (apprehension, distress) – continuing</td>
<td>Avoid Alfred Hospital</td>
</tr>
<tr>
<td></td>
<td>FG2F1</td>
<td>Fear</td>
<td>Ongoing avoidance of Aquarium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joy (relief)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FG5F3</td>
<td>Fear (apprehensive)</td>
<td>Ongoing avoidance of Aquarium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sad (dejected)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FG6F3</td>
<td>Fear (fear, scared) strong</td>
<td>Ongoing avoidance of Aquarium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kraft</td>
<td>FG4F2</td>
<td>Fear (unease, apprehension)</td>
<td>Ongoing avoidance of all peanut butter</td>
</tr>
<tr>
<td></td>
<td>FG4F3</td>
<td>Anger (anger – 2 weeks, hate)</td>
<td>Ongoing boycott</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joy (relief)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FG4M4</td>
<td>Anger (annoyed)</td>
<td>Ongoing boycott</td>
</tr>
<tr>
<td></td>
<td>FG5F1</td>
<td>Fear (dread)</td>
<td>Ongoing avoidance of all peanut butter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anger (disgust)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sad (sympathy)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FG5M2</td>
<td>Anger (disgust, sceptical)</td>
<td>Ongoing boycott Kraft products and Phillip Morris</td>
</tr>
<tr>
<td></td>
<td>FG8M1</td>
<td>Anger (annoyance: a few weeks)</td>
<td>Avoided all peanut butters for some time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sad (sympathy)</td>
<td></td>
</tr>
<tr>
<td>Ansett</td>
<td>FG2M5</td>
<td>Anger (continuing)</td>
<td>Avoid flying Ansett</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear (nervous)</td>
<td></td>
</tr>
<tr>
<td>Mad Cow</td>
<td>FG2M3</td>
<td>Anger (contempt)</td>
<td>Avoided beef when living in England</td>
</tr>
<tr>
<td></td>
<td>FG6F4</td>
<td>Anger (strong anger, frustration)</td>
<td>Avoided beef and all suspect products when living in England</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear (scared, worried, concern)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sad (hopeless)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FG6M1</td>
<td>Fear (fear, worry, apprehensive)</td>
<td>Avoided suspect products imported from England</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surprise (amazement)</td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td>Code</td>
<td>Emotions</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Nike</td>
<td>FG8M3</td>
<td>Anger (Anger, frustration)</td>
<td>All on-going Ongoing boycott of tennis shoes</td>
</tr>
<tr>
<td></td>
<td>FG5F3</td>
<td>Anger (strong disgust, contempt, frustration)</td>
<td>Sad (disappointment) All on-going Ongoing boycott and encourages others to boycott</td>
</tr>
<tr>
<td></td>
<td>FG5M1</td>
<td>Anger (hostility)</td>
<td>Sad (unhappy) Switched brands</td>
</tr>
<tr>
<td></td>
<td>FG5M2</td>
<td>Anger (contempt, frustration)</td>
<td>Sad (disappointment) Ongoing boycott</td>
</tr>
<tr>
<td>Ford</td>
<td>FG3M5</td>
<td>Anger (outrage, disgust, revulsion, annoyed, displeasure)</td>
<td>Fear (uneasiness) Sad (hopelessness) All ongoing Ongoing boycott of Ford</td>
</tr>
<tr>
<td>Nestle</td>
<td>FG5F3</td>
<td>Anger (outrage)</td>
<td>Ongoing boycott Nestle</td>
</tr>
<tr>
<td></td>
<td>FG5M1</td>
<td>Surprise</td>
<td>Boycott Nestle - temporary</td>
</tr>
<tr>
<td></td>
<td>FG5M2</td>
<td>Anger (frustration, disgust)</td>
<td>Sad (sympathy) Ongoing boycott Nescafe</td>
</tr>
</tbody>
</table>
Chapter 5 Appendices - Development of the Measurement Instrument

Appendix 5.1 One of the Air Crash Photos Originally Tested
A preliminary report on the Brisbane air crash involving a Domestic Airlines’ 737 a week ago pinpointed the airline’s neglected engine maintenance as the most likely crash cause.

The National Accident Investigation Authority’s Chief Investigator, Chris Jones, said that Domestic Airlines’ records showed that it had failed to carry out an important engine safety service for that particular plane. Jones said the company had slashed numbers of maintenance crew in the previous six months as a cost-cutting measure.

The crash death toll has climbed to 33 following the death of a crew member this morning from injuries. A further six people remain in a critical condition.

The plane, en route to Sydney, crashed shortly after take-off from Brisbane Airport.

The remaining 10 passengers and crew suffered minor injuries and shock but have since been released from hospital.

A pilot warned passengers to brace for an emergency landing after announcing that the right engine had failed.

Shortly after, the plane plummeted to the ground.

More reports page 4-5
IMPORTANT: PLEASE READ THE NEWS STORY BEFORE READING ANY FURTHER QUESTIONS. PLEASE DO NOT LOOK BACK AT EARLIER SECTIONS OF THIS QUESTIONNAIRE

You are about to read a follow-up story printed in a fictitious Australian newspaper, the reliable and reputable *Sunday News*, about a fictitious Australian airline company, D.A., whose plane crashed. Imagine that this is a real story about a real situation.

**WE ACCEPT FULL RESPONSIBILITY, SAYS CEO**

Domestic Airlines’ Chief Executive Officer, Pat Carney, has commented on the preliminary findings on the cause of the company’s 737 crash last Monday.

“We accept full responsibility for the crash,” Carney said.

“We at Domestic Airlines are very sorry and express our deeply felt apology and sympathy to the victims and families.

“It was something that should never have been allowed to have happened.

“We will do all we can to compensate those affected. We will take all action necessary to ensure something like this never happens again,” Carney said.
Appendix 5.4 Comparison of Zaichkowsky’s (1985) and McQuarrie and Munson’s (1992) Scales

| Table 1: Personal Involvement Inventory (PII) (Zaichkovksy, 1985) *indicates the item is reverse scored |
| SCALE ITEMS |
| important | of no concern | irrelevant | means a lot to me | matters to me | unexciting | boring | appealing | useless | valuable | trivial | beneficial | unwanted | interested | significant | vital | mundane | essential | undesirable | wanted | not needed |
| important | of no concern | irrelevant | means a lot to me | matters to me | unexciting | boring | appealing | useless | valuable | trivial | beneficial | unwanted | interested | significant | vital | mundane | essential | undesirable | wanted | not needed |
| unimportant* | of concern to me | relevant | means nothing to me | doesn’t matter* | exciting | interesting | unappealing* | useful | worthless* | fundamental | not beneficial* | wanted | needed |

| Table 2: Revised Involvement Inventory (RPII) (McQuarrie & Munson, 1992) * their addition to the PII |
| SCALE ITEMS | Importance | Interest |
| important - unimportant | x |
| of concern - of concern | x |
| to me | |
| irrelevant - relevant | x |
| means a lot to me - means nothing to me | x |
| nothing to me | |
| matters to me - doesn’t matter | x |
| matter | |
| unexciting - exciting | x |
| boring - interesting | x |
| appealing - unappealing | x |
| dull - neat* | x |
| fun - not fun* | x |
Appendix 5.5 The Crisis Involvement Inventory

Items 1, 2, 3, 4 and 5 reflect the importance side of the scale, while items 6, 7, 8, 9 and 10 represent interest and are based on Zaichkowsky’s (1985) 20-item scale and McQuarrie and Munson’s (1992) 10-item scale. Items 9 and 10 are based on two items from Faber et al.’s (1993) political involvement scale. The involvement questions appeared in the questionnaire in the following form:

Please circle the number on the scale regarding how you feel about this crisis. This crisis is:

1. of no concern to me
2. important
3. irrelevant
4. means a lot to me
5. matters to me
6. is significant
7. interesting
8. insignificant
9. would pay attention to
10. not worth discussing

1 2 3 4 5 6 7

of concern to me
unimportant*
relevant
means nothing to me*
doesn’t matter to me*
is insignificant
not interesting*
significant
would not pay attention to
worth discussing with others

* Reverse scored

Scoring for data analysis (from McQuarrie & Munson, 1992)

With a scale ranging from 1 to 7 (e.g., unimportant = 1, important = 7), the potential score ranges from 10 to 70, with the theoretical mean at 40. High involvement refers to scores in the top quartile of distribution (52.5 to 70) with low involvement referring to scores in the first quartile of distribution (10 to 27.5). However, to aid analysis, these scores are now averaged, making the theoretical mean 4, with the top quartile ranging from 5.25 to 7 and the first quartile from 1 to 2.75.
Appendix 5.6 Manipulation Check used for Crisis Cause (Jorgensen, 1996)

The manipulation check on crisis cause appeared in the questionnaire in the following form:

For each statement below, please circle the number on each scale that best represents your view. The cause of this crash…

was wholly internal to the company 1 2 3 4 5 6 7 was wholly external to the company
was entirely controllable by the company 1 2 3 4 5 6 7 was entirely uncontrollable by the company

Scoring:
lower scores on the first item indicate higher internality
higher scores on the first item indicate higher externality
lower scores on the second item indicate high controllability
higher scores on the second item indicate high uncontrollability
**Appendix 5.7 McAuley, Duncan and Russell’s (1992) Revised Causal Dimension Scale (CDS11)**

Is the cause(s) something:

<table>
<thead>
<tr>
<th>Locus of causality</th>
<th>1. That reflects an aspect of yourself</th>
<th>2. Inside of you</th>
<th>3. Something about you</th>
<th>Reflects an aspect of the situation</th>
<th>Outside of you</th>
<th>Something about others</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Over which others have control</td>
<td>9 8 7 6 5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Under the power of other people</td>
<td>9 8 7 6 5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Other people can regulate</td>
<td>9 8 7 6 5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal (internal) control</td>
<td>7. Manageable by you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. You can regulate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Over which you have power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stability</td>
<td>10. Permanent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Temporary</td>
</tr>
<tr>
<td></td>
<td>11. Stable over time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Variable over time</td>
</tr>
<tr>
<td></td>
<td>12. Unchangeable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Changeable</td>
</tr>
</tbody>
</table>
Appendix 5.8 Causal Dimension Scale Based on the CDS11

The attribution questions appeared in the questionnaire in the following form:

The items below concern your impressions or opinions of the cause of this crisis. For each statement below, please circle the number on each scale that best represents your view of the cause of the crash. Did the crash result from something:

<table>
<thead>
<tr>
<th>Description</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>that reflects on an aspect of Domestic Airlines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that reflects an aspect of the situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that is inside Domestic Airlines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that is outside of Domestic Airlines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to do with other companies, or people outside of Domestic Airlines, or an outside situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to do with Domestic Airlines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>over which other companies, or people outside Domestic Airlines have control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>over which other companies, or people outside Domestic Airlines have no control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that is under the power of other companies or people outside Domestic Airlines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that was not under the power of other companies or people outside Domestic Airlines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that Domestic Airlines could have prevented</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that was not preventable by Domestic Airlines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that was manageable by Domestic Airlines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that was not manageable by Domestic Airlines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that was under Domestic Airlines’ control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that was not under Domestic Airlines’ control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>over which Domestic Airlines had power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>over which Domestic Airlines did not have power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Locus of causality(internal/external to company): Items 1, 2, 3;
External control (controllable by others/situational factors): Items 4, 5, 6;
Internal control (controllable by the company): Items 7, 8, 9.

Scoring of this scale

The total scores for each dimension are obtained by summing the items as follows:

1, 2, 3 = locus of causality: Low score = internal; High score = external;
4, 5, 6 = external controllability: Low score = Low externally controllability;
                 High score = High external controllability.
7, 8, 9 = internal controllability: Low score = internally controllable by the company;
High score = Internally uncontrollable

Appendix 5.9 Accountability, Forseeability and Intentionality Scale

The accountability, foreseeability and intentionality questions appeared in the questionnaire in the following form:

Q. In your opinion, how accountable is the company for the crash? Please circle the number on the scale that best represents your view. The company is:

<table>
<thead>
<tr>
<th>not at all</th>
<th>very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>very accountable</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>not at all accountable</td>
<td>7 6 5 4 3 2 1</td>
</tr>
</tbody>
</table>

Scoring: Low score equals less accountable

Q. The items below concern your impressions or opinions of the cause of this crisis. For each statement below, please circle the number on each scale that best represents your view of the cause of the crash. Did the crash result from something:

<table>
<thead>
<tr>
<th>not at all</th>
<th>very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>that Domestic Airlines could not have foreseen would happen</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>that was foreseeable by Domestic Airlines</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>that was intended by Domestic Airlines</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>that was not intended by Domestic Airlines</td>
<td>7 6 5 4 3 2 1</td>
</tr>
</tbody>
</table>

Low score equals not foreseeable, high score equals foreseeable;
Low score equals intentional, high score equals not intentional.
Appendix 5.10 Responsibility Scale

The responsibility questions appeared in the questionnaire in the following form:

For each statement below, please circle the number on the scale that best represents your feelings towards the company, DA…

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale (1-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do you feel the company is responsible for the cause of the problem?</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>To what extent do you feel the company could have avoided the problem?</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>To what extent do you feel the company could have controlled the cause of the problem?</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

Scoring: the higher the score, the higher the level of responsibility the company is judged to have.
Appendix 5.11 Developing the Crisis Emotion Scale

5.11.1 Emotion Scales Reviewed

- Emotions to advertising e.g., Holbrook and Batra’s (1987) Standardised Emotional Profile; Batra and Ray’s (1986) typology of 13 categories of affective responses to advertising; Edell and Burke’s (1987) Feelings towards Ads.
- Consumption emotions e.g., Richins’ (1997) Consumption Emotion Set (CES) using 16 emotion clusters.

Other scales:

- Emotions Profile Index (Plutchik & Kellerman, 1974 in Plutchik, 1994).
- The Differential Emotions Scale – IV (DES-IV) - is a 36-item questionnaire measuring 12 emotions on a 5-point scale (Izard, Libero, Putnam, & Haynes, 1993).
- EMFACS –7 listing of seven affective facial reactions (Friesan & Ekman, 1984).
- The Emotion Rating Scale which lists five unfavourable and five favourable emotions on 9-point Likert scales (Weissman & Lopez, 1997).
- Dictionary of Affect in Language (Whissel, 1986) contains words that load onto two dimensions of affect, arousal and pleasure/displeasure, a model developed by Russell (1980). The dictionary has quantified the emotionality of many common words along the dimensions of pleasantness and activation.
- Multiple Affect Adjective Checklist-Revised (MAACL-R) (Zuckerman & Lubin, 1985) consisted of a list of 132 adjectives with affective connotations. The five unipolar scales Anxiety (A), Depression (D), Hostility (H), Positive Affect (PA), and Sensation Seeking (SS) were derived from factor analysis and the two composite scales DYS (sum of A, D, and H scales) and PASS (sum of PA and SS scales) can be scored (Lubin, Van Whitlock, & Zuckerman, 1998).
- Based on PANAS-X, Feldman Barrett’s (1997) Negative Emotion Scale clustered negatively valenced emotion states under sadness, hostility, guilt, fear and a Positive Emotion Scale, using the Joviality subscale of PANAS-X.
5.11.2 Most Commonly Used Emotion Words From The Focus Group Study

Congruent with Carpenter and Halberstadt’s (1996) recommendation that layperson’s categorisations should be used in development of a scale, this section lists each emotion category (according to Shaver et al., 1986) and the number of times participants used each word in the 10 crises analysed in Study 1. Those words highlighted in bold are the words selected for the emotion scale based on their degree of usage in these crises. While use of negative emotion words was more common than positive emotion words, in order not to skew answers to only negative, the lesser used positive emotion words have been included. As noted earlier in this chapter, the word form suited to the questionnaire is used e.g., instead of frustration, frustrated is used.

Anger: anger 31, annoyed 25, disgust 16, frustration 11, contempt = 10/cynical = 6; dislike 6, outrage 6, bitter 4, vengeful 3, hate 2, loathe 1, hostility 1, irritated 2, jealousy 1, mad 1, resentful 1, resigned 1, sceptical 1, torment 1, displeased 1, fury 1.

Fear: fear 14, worried 11, uneasy 9, scared 7, apprehensive 5, concerned 4, distressed 4, nervous 3, alarmed 3, dread 2, afraid 1, anxious 1, frightened 1, horrified 1, panicky 1.

Sad: disappointment 21, sympathy 12, hopeless 6, unhappy 5, sorry 5, bad 1, dejected 2, despair 1, guilt 1, helpless 2, insecure 6, insulted 3, neglected 1, regret 1, sad 1, suffering 1, upset 4.

Joy: relief 8, satisfaction 4, enjoyment 4, content 3, glad 3, good 2, proud 2, happy 2, optimistic 1, pleased 1, amused 1, calm 1, elated 1.

Surprise: surprised 8, shock 4, amazed 3.

Love: like 4, compassion 2, fond 1, love 1, caring 1.
Appendix 5.12 Crisis Emotion Scale

For each word below, please circle the number on the scale that best describes the feelings that you have about the airline company, D.A. Towards D.A. I feel….

<table>
<thead>
<tr>
<th></th>
<th>not</th>
<th>very</th>
<th>not</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>at all</td>
<td>much</td>
<td>at all</td>
<td>much</td>
</tr>
<tr>
<td>angry</td>
<td>1 2 3 4 5 6 7</td>
<td>sorry</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>disappointed</td>
<td>1 2 3 4 5 6 7</td>
<td>annoyed</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>compassionate</td>
<td>1 2 3 4 5 6 7</td>
<td>unhappy</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>relieved</td>
<td>1 2 3 4 5 6 7</td>
<td>shocked</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>surprised</td>
<td>1 2 3 4 5 6 7</td>
<td>satisfied</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>disgusted</td>
<td>1 2 3 4 5 6 7</td>
<td>amazed</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>hopelessness</td>
<td>1 2 3 4 5 6 7</td>
<td>liking</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>sympathetic</td>
<td>1 2 3 4 5 6 7</td>
<td>dislike</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>contented</td>
<td>1 2 3 4 5 6 7</td>
<td>outraged</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>frustrated</td>
<td>1 2 3 4 5 6 7</td>
<td>contempt</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

For each word below, please circle the number that best describes the feelings that you have towards flying with this company. I feel….

<table>
<thead>
<tr>
<th></th>
<th>not</th>
<th>very</th>
<th>not</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>at all</td>
<td>much</td>
<td>at all</td>
<td>much</td>
</tr>
<tr>
<td>concerned</td>
<td>1 2 3 4 5 6 7</td>
<td>uneasy</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>enjoyment</td>
<td>1 2 3 4 5 6 7</td>
<td>scared</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>worried</td>
<td>1 2 3 4 5 6 7</td>
<td>distressed</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>insecure</td>
<td>1 2 3 4 5 6 7</td>
<td>glad</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>apprehensive</td>
<td>1 2 3 4 5 6 7</td>
<td>fearful</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>unhappy</td>
<td>1 2 3 4 5 6 7</td>
<td>contented</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Scoring of this scale:

In both scales, the scores for words in each category (anger, fear etc.) are totalled and divided to form the mean score for each emotion. The higher the score, the higher the judged intensity for each emotion.

- Anger: angry, annoyed, contempt, disgusted, dislike, frustrated, outrage
- Fear: fearful, apprehensive, concerned, distressed, scared, uneasy, worried
- Sad: disappointed, hopelessness, insecure, sorry, sympathy, unhappy
- Joy: contented, enjoyment, glad, relieved, satisfied
- Surprise: amazed, shock, surprised
- Love: compassion, liking
Appendix 5.13 Review of Scales

5.13.1 Review of Existing Behavioural Intentions Scales

Blodgett, Hill, and Tax (1997) developed a 3-item complaint likelihood scale that measured complaint to store, product return and inaction. This had an alpha coefficient of .78, but no examination of the scale’s validity.

Patterson, Johnson, and Spreng (1997) developed a 3-item scale measuring likelihood of re-using a service which had an alpha coefficient of .97 and convergent and discriminatory validity.

Boulding, Kalra, Staelin, and Zeithaml (1993) developed a 2-item scale measuring positive behavioural intentions regarding willingness to return to the same hotel and to provide positive word of mouth communication to friends, yielding an alpha value of .92.

Several researchers developed purchase intention scales. Baker and Churchill (1977) developed a 3-item measure of purchase intent toward a product in an ad (in Bruner & Hensel, 1998). Dodds, Monroe, and Grewal (1991) used a 5-item measure of purchase intent (in Bruner & Hensel, 1998), which resulted in coefficient alphas of .97 and .96; Bone and Ellen (1992) used a 3-item measure of purchase intent for an advertised brand: the scale had reported coefficient alphas of .90 and .92 (in Bruner & Hensel, 1998); Petrevu and Lord (1994) used a 3-item measure of purchase intent for a specified brand, with a reported alpha coefficient of .91 for the scale (in Bruner, James, & Hensel, 2001). Juster (1966) developed the 11-point purchase probability scale.
5.13.2 Development of the Crisis Behavioural Intentions Scale

Keeping in mind that you, or those close to you, frequently fly with D.A., for each statement below, please circle the number that best indicates how likely it is that you would…..

<table>
<thead>
<tr>
<th>a. Talk about this with friends and relatives</th>
<th>not at all 1 2 3 4 5 6 7</th>
<th>very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Talk about this with other airline customers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c. Decide not to fly with this airline</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d. Decide not to fly with any airline</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e. Convince friends and relatives not to fly with this airline</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>f. Stop using any other service, e.g air freight, operated by this airline</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>g. Switch to a competitor</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>h. Continue flying with the airline, but less often</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>i. Complain to consumer agencies or relevant authorities</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>j. Complain to company employees or a manager</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>k. Complain to the media about this</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>l. Complain to relevant web sites about this</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>m. Find out more information about this crisis</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>n. Continue flying with this airline</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>o. Say positive things about this airline to other people</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>p. Recommend the airline to someone who seeks your advice</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>q. Encourage friends and relatives to use the company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>r. Consider the company first when buying flights</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>s. Do business with the airline more often</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>t. Forget the incident and do nothing</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

*a Based on Singh (1988)

b Based on Zeithaml et al. (1996)

Developed from Study 1 participants’ behaviour

Scoring:

* indicates reverse scored

** indicates neutral behavioural intent
Identification of items in the scale

These items were worded as closely as possible to the items in the original scales by Singh (1988, 1990) and Zeithaml et al. (1996). Additionally, some items were developed from behaviours reported in the focus group study.

- Items a, b and e referred to Word of Mouth behaviour (Singh, 1988; Zeithaml et al., 1996)
- Items c, f, g and h were Switching behaviour (Zeithaml et al., 1996)
- Items i, j, k, l were Complaint behaviour Singh (1988, 1990)
- Item m was Information Seeking (from Study 1)
- Items n, o, p, q, r, s and t were classified as Loyalty, as per Zeithaml et. al. (1996)
- Item d was considered to be a general Contagion effect, affecting other product categories (from Study 1).
As pre-testing indicated participants had great difficulty with semantic differential scales, an explanation was used. Thus the attitude question appeared in the questionnaire in the following form:

For this question, we need you to judge the best answer that applies to you. For each statement, the left side says something opposite to the right side. Read both sides of each statement and choose which best suits your view. Then select the number that represents how strongly you feel this way. Choose only one number for each scale:

1 and 7 represents strong points of view
2 and 6 are medium
3 and 5 mean you are slight inclined to that viewpoint
4 means you are uncertain

For each statement below, please circle the number that best describes your feelings about the airline company, D.A. My feelings are….

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unfavourable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Negative</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Scoring:
High scores suggest that the person had a very favourable attitude toward a specified service provider, while low scores suggested a negative attitude.

As no scoring guide was listed by Stafford (1996) and Day and Stafford (1997) in line with other scoring here, McQuarrie and Munson’s (1992) scoring guide was used. With a scale ranging from 1 to 7 (e.g., unimportant = 1, important = 7), the potential score for attitude ranges from 3 to 21, with the theoretical mean at 12. High positive attitude refers to scores in the top quartile of distribution with high negative attitude referring to scores in the bottom quartile of distribution. To aid analysis, these scores have now been averaged, so that the mood scores for each individual range from 1-7, making the theoretical mean 4, with the top quartile ranging from 5.25 to 7 and the lowest quartile from 1 to 2.75.
Appendix 5.15  Positive And Negative Affectivity Scale (Watson & Tellegen, 1985)

The demographic questions appeared in the questionnaire in the following form:

For each word below, please circle the number that describes how you generally feel. On an average day I feel…..

<table>
<thead>
<tr>
<th>Word</th>
<th>Not at all</th>
<th>Very much</th>
<th>NA or PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Distressed</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Excited</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Upset</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Guilty</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Scared</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Hostile</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Proud</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Irritable</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Alert</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Ashamed</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Inspired</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Nervous</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Determined</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Attentive</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Jittery</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Interested</td>
<td>1 2 3 4 5 6 7</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>Afraid</td>
<td>1 2 3 4 5 6 7</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

Scoring guide:

As no scoring guide was listed by Watson and Tellegen (1985), McQuarrie and Munson's (1992) scoring guide for involvement was used with high NA/PA referring to scores in the top quartile of distribution and low NA/PA referring to scores in the first quartile of distribution. To aid analysis, these scores are averaged, so that the PA and NA scores for each individual range from 1-7, making the theoretical mean 4, with the top quartile ranging from 5.25 to 7 and the lowest quartile from 0 to 2.75.
Appendix 5.16 Mood Short Form (MSF) Scale (Peterson & Sauber, 1983 in Bearden et al., 1999)

In the MSF questionnaire, as pre-testing had indicated some confusion with the third item’s negative phrasing this was changed from “For some reason I am not very comfortable right now” to a more positive wording as evident in the scale. The MSF as it appeared in the questionnaire took the following form:

For each statement below, please circle the number on each scale that best indicates how you feel right now:

<table>
<thead>
<tr>
<th>Statement</th>
<th>not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently I am in a good mood</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>As I answer these questions I feel very cheerful</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>For some reason I am very comfortable right now</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>At this moment I feel edgy or irritable*</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

Scoring of the scale:

The fourth item was reverse scaled so that lower numbers represented more positive mood items (Peterson & Sauber, 1983 in Bearden, Netemeyer, & Mobley, 1999). With a scale ranging from 1 to 7 (e.g., unimportant = 1, important = 7), the potential score ranges from 4 to 28, with the theoretical mean at 16. High positive mood refers to scores in the top quartile of distribution (22.5 - 28) with negative (low mood) referring to scores in the first quartile of distribution (4-10).
Appendix 5.17 Demographic Information: Age, Gender, Education, Income Scale

The demographic questions appeared in the questionnaire in the following form:

I would appreciate some background information about yourself as this would help with my research. This information is completely confidential.

Q. How old are you? ___________ years

Q. Are you…
1. male
2. female

Q. Please circle the number of the answer that applies to you. The highest level of education I completed was:
   primary school
   high school
   a diploma, associate diploma, certificate or trade certificate
   a bachelor degree
   a post-graduate degree

Q. Please circle the number of the answer that applies to you. My yearly income before tax is:
   $14,999 or under
   $15,000 - $24,999
   $25,000 - $34,999
   $35,000 - $49,999
   $50,000 - $74,999
   $75,000 - $99,999
   $100,000 - $149,999
   $150,000 or more

Q. Which is the main culture that you see yourself as belonging to (e.g., Australian, English, Chinese)? ________________________________
Question regarding detection of experimental hypothesis:

Q. What did you believe was the purpose of this questionnaire?

Questions regarding realism of the experimental scenarios:

Please circle the number that best represents your response to this statement: “I think situations like that described about the air crash occur in real life”

<table>
<thead>
<tr>
<th>not</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td>at all</td>
<td>much</td>
</tr>
<tr>
<td>1  2  3  4  5  6  7</td>
<td></td>
</tr>
</tbody>
</table>

I was able to imagine that this sort of situation could happen to me or those close to me

<table>
<thead>
<tr>
<th>not</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td>at all</td>
<td>much</td>
</tr>
<tr>
<td>1  2  3  4  5  6  7</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5.19 Statement Made in the Questionnaire Prior to the Newspaper Story

On the next page you will read a story printed in a fictitious Australian newspaper called *The Sunday News* - assume that it is a reliable and reputable newspaper. It concerns a fictitious Australian airline company, Domestic Airlines (D.A.), one of whose planes has crashed.

D.A., a long established and reputable local airline company, has not previously been involved in any major safety crisis, although it has had a minor incident at an airport. Imagine that this is a real story about a real situation and that you, or those close to you, frequently fly with D.A.
Pilot Study Consent Form and Prize Draw

Project Title: Consumer reactions to company crisis news stories

If you wish to participate in the study, please fill out this consent form and put it in the box marked “Prize draw and Consent Form” separately from the questionnaire to maintain confidentiality. There is a possibility that, if the type of company crisis described - an air crash - has personally affected you or people close to you, it may bring up distressing memories. Therefore, you may like to withdraw now.

I agree to take part in the above Griffith University research project. I have read the letter on the front of the questionnaire explaining the study. I understand that agreeing to take part means that I am willing to:

Answer the attached questionnaire

In addition:

I understand that I will be answering questions on how an imaginary company accident news story – that of an air crash - affects me personally

I understand that my participation is voluntary, that I can choose not to answer any or all of the questions

I understand that confidentiality is guaranteed and that the information I give will not be used to identify me personally

I understand that Griffith University requirements are that the original data or electronically stored copies of the original data will be retained for at least five years, after which it may be destroyed

I am aged 18 years or older

Name___________________________________________________________________ (please print)

Signature___________________________________________________Date  ___________________

Postal Address_______________________________________________________________________

________________________________________________________________________________________________________ Lecture and time___________________________

Go into a draw for one of three $50 book vouchers

To enter our prize draw for one of three $50 book vouchers (one for each 100 students) simply fill this form out, then insert it into the box marked “entry prize draw and consent form” and hand the filled out questionnaire to Lyn McDonald on completion. The prizes will be drawn and delivered at your next lecture.
Complaints

If you have any complaints concerning the manner in which the study is conducted the complaint may be given to the researcher, or if an independent person is preferred, either:

the University's Research Ethics Officer, Office for Research, Bray Centre, Griffith University, Kessels Road, Nathan, Qld 4111, on (07) 3875 6618  or

the Pro-Vice-Chancellor (Administration) Office of the Vice-Chancellor, Bray Centre, Griffith University, Kessels Road, Nathan, Qld 4111, on (07) 3875 7343.

Further information

Lyn McDonald  Professor Beverley Sparks  Associate Professor Ian Glendon
PhD student  Academic Supervisor  Academic Supervisor
School of Tourism & Hotel Management  Professor of Hotel Management  Head
& Dean, International
Gold Coast campus  School of Tourism and (Business)
Griffith University  Hotel Management  Gold Coast campus
Phone: (07) 5552 8170  Gold Coast campus  Griffith University
l.mcdonald@griffith.edu.au  Griffith University
Appendix 6.2 Pilot 1 Details Covering Assumptions of Univariate Normality for Each Variable in the Questionnaire

6.2.1 Details on Missing Data

Two participants missed two out of 10 possible NA (Negative Affectivity) responses. The four missing items accounted for only 1.3% of scores, below the 5% range of concern.

Four participants each missed one of 10 possible involvement responses. Missing items totalled only a high of four out of 316, representing only 1.3% of the sample.

The scale used for locus and controllability contained three items for each of the three constructs: locus (degree of internality/externality), internal controllability and external controllability. Three participants each missed one of 10 attribution responses; An examination of missing data for individual variables for attributions showed a maximum of .6 -.9 % of the missing (a maximum of 3 out of 318), below the range of concern.

The foreseeability and intentionality constructs each contained one item, and both showed no missing. The Accountability construct contained only one item which two participants missed. An examination of missing data for individual variables for attributions showed a maximum of .6 % of the missing (2 out of 318), below the range of concern.

The responsibility construct contained three items. An examination of missing data showed two to three items only missing (0.6 - 0.9% of total cases).

Eleven participants did not answer between one to all of the 20 questions on emotions to the company (totalling just 43 missing responses from a total of 6320 responses); Four participants did not answer four responses on emotions to service use; Less than 3% of the sample (10 out of 318) were missing, below the 5% range of concern.

Eight participants did not answer 11 of the 20 behaviour responses. An examination of missing data for individual variables for behaviour showed a maximum of 3% of the sample missing (7 out of 318) for each behaviour, below the 5% range of concern.

The attitude construct contained three items. One respondent missed one response of the three for attitude. An examination of missing data for attitude showed a maximum of three missing items for each variable, only .9% of cases, so this was not of concern.
For manipulation checks, five participants did not answer the question on level of injury, while one participant missed the two manipulation check responses for locus and control. Of the single answer demographic responses, one missed the education question, 11 the income question and nine the culture question. No scores were missed for age, gender, realism of situation or ability to imagine the situation. No missing items were of concern.

6.2.2 Testing missing data for the mood scale.

As 9.5% of the sample missed all or part of the mood scale independent samples t-tests were used to test the variation of scores of the two groups, respondents and non-respondents. For involvement, Levene’s test was significant at $p = .953$, thus as $p > .05$, the assumption of equal variances was not violated (Pallant, 2001). The t-value was 1.171 and the significance (2-tailed) was $p > .05$ at .243, indicating no significant difference between the means of the two groups (Pallant, 2001). For responsibility, as $p = .127$, the assumption of equal variances was not violated. The t-value was .767 and the significance (2-tailed) was $p > .05$ at .444, indicating no significant difference between the two group means. For the attribution of internal controllability, as $p = .587$, the assumption of equal variances was not violated. The t-value was 1.378 and the significance (2-tailed) was .169, indicating no significance between the two group means. For the emotion of surprise, as $p = .474$, the assumption of equal variances was not violated. The t-value was .965 and the significance (2 tailed) was $p > .05$ at .335, indicating no significant difference between the two group means.
6.2.3 Assumptions of Normality for the Items on the Mood Scale

While there was a number of outliers for item c on the mood scale, examination of differences between group and trimmed means on all items showed a difference of 0.04 or less, indicating that these made little difference to the outcome. As Hair et al. (1998) argued for retaining outliers where there was no proof of aberrance, the outliers were retained. There was no severe skewness or kurtosis. As mood influences attributions (the more negative the mood, the more negative the attributions with more internal and controllable attributions) and emotions (with a negative mood resulting in more negative emotions), bivariate tests for linearity were randomly conducted revealing some degree of linear relationships between mood and attributions for locus (internal/external), internal controllability and external controllability attributions, responsibility judgments and for emotions like anger and surprise.

6.2.4 Assumptions of Normality for the Items on the PANAS Scale

There was a small proportion of outliers and extreme scores on most of the 20 PANAS items, but these accounted for less than 0.18 difference when comparing the trimmed means with the means. Congruent with findings from studies on normal population samples (i.e. those not depressed), positive affect (PA) was negatively skewed while negative affect (NA) was positively skewed. Using the ratio of skewness and kurtosis divided by their standard errors, most items were outside the normal range of -2 to +2 advised by Coakes and Steed (2003). Despite the strong level of skewness, examination of the normal probability plots (Q-Q plots) showed that most scores appeared to be fairly normally distributed along the expected normal value line, except for NA items of guilty, scared, hostile, ashamed and afraid. Transformations were not carried out, congruent with Tabachnik and Fidell’s (2001) recommendation. As PANAS was hypothesised to influence negative emotions, linearity was randomly checked at bivariate level, and some indications of linearity emerged, although there was a strong degree of heteroscedasticity. However, as argued earlier, this was not a great concern in ungrouped data (Tabachnik & Fidell, 2001).
6.2.5 Assumptions of Normality for the Involvement Items

The involvement items showed a small number of outliers and two extreme scores, but examination of differences between group and trimmed means on all items showed a difference of 0.14 or less, indicating that these made little difference to the outcome. As Hair et al. (1998) argued for retaining outliers where there was no proof of aberrance, the outliers were retained. All involvement items were strongly negatively skewed with overall high means, as expected from pre-pilot testing. Thus no transformations were carried out. While there was some kurtosis, examination of the Q-Q normality plots showed no strong deviation from the normal. As involvement influences degree of emotional intensity, tests for linearity were randomly conducted and some slight linear relationships were indicated. Heteroscedasticity was found, but this is common in ungrouped data (Tabachnik & Fidell, 2001).

6.2.6 Assumptions of Normality for the Items Dealing with Attributions of Locus, Internal Controllability and External Controllability

The scale used for locus and controllability contained three items for each of the three constructs: locus (degree of internality/externality), internal controllability and external controllability. An examination of the boxplots showed a small number of outliers, but as the difference between the 5% trimmed means and the means was only 0.09, these made little difference and were retained. The Kolmogorov-Smirnov test of normality for all items was significant at less than .05, showing that the assumption of normality was violated. The histograms showed some items were a little positively skewed, some a little negatively skewed and some normally distributed. Using the ratio of skewness and kurtosis divided by their standard errors, skewness and kurtosis was close to normal for most items, as reflected in the Q-Q plots. Those items most outside the normal range of -2 to +2 (Coakes & Steed, 2003) for skewness were internal controllability (item 2 with a skewness of 4.5 and item 4 with a skewness of 5.6). However, examination of the Q-Q plots showed no major deviation from the normal line, thus the items were not transformed.

As attributions influences emotions (with internally controllable attributions hypothesised to relate to negative emotions) bivariate tests for linearity were randomly conducted revealing clear linear relationships for anger and locus and internally controllable and externally controllable. Heteroscedasticity was found, but this is common in ungrouped data (Tabachnik & Fidell, 2001).
6.2.7 Assumptions of Normality for Foreseeability

The foreseeability construct contained only one item. The boxplot showed no outliers. The histogram showed a relatively normal distribution, although the Kolmogorov-Smirnov test of normality was significant at less than .05, showing that the assumption of normality was violated.

Using the ratio of kurtosis divided by its standard error, kurtosis was -3.7, a little outside the normal range of -2 to +2, although the skewness ratio was within normal range. Additionally, the Q-Q normality plot showed a relatively normal distribution and no transformation was conducted. While a linear relationship was predicted between foreseeability and negative emotions, some heteroscedasticity was found, which is common in ungrouped data (Tabachnik & Fidell, 2001).

6.2.8 Assumptions of Normality for Intentionality

The intentionality construct contained only one item. The boxplot showed several outliers. However, the difference between the means and the 5% trimmed means was only 0.15, indicating that outliers did not have a substantial impact on the means. The Kolmogorov-Smirnov test of normality was significant at less than .05, showing that the assumption of normality was violated. The histogram for intentionality showed a strong positive skew as expected (participants did not feel that the company’s role in the crisis was intentional) and a flattened kurtosis. The Q-Q normality plot showed some departure from the normal. The ratio of skewness to its standard error was strong at 8.6, although the ratio for kurtosis was within normal range at 1.1. A square root transformation was not carried out, in line with Tabachnik and Fidell’s (2001) recommendation.

Although linear relationships were predicted between intentionality and emotions, there was some degree of heteroscedasticity.
6.2.9 Assumptions of Normality for Accountability

The Accountability construct contained only one item. An examination of the boxplot showed a small number of outliers, but as the difference between the 5% trimmed means and the means was only 0.08, these made little difference and were retained. The Kolmogorov-Smirnov test of normality was significant at less than .05, showing that the assumption of normality was violated. The histogram showed a flattened kurtosis and a strong negative skew, as expected. Using the ratio of kurtosis divided by its standard error, its kurtosis at -2.45 was only just outside the normal range of -2 to +2 (Coakes & Steed, 2003). The skewness was -4.30. A reflect and square root transformation was not carried out. As accountability was hypothesized to be related to negative emotions, a random test for linearity found higher accountability was associated with higher anger.

6.2.10 Assumptions of Normality for Responsibility

The responsibility construct contained three items. An examination of the boxplots revealed a small number of outliers for each of the three responsibility items, and two extreme scores for the second item, but as the difference between the 5% trimmed means and the means was a maximum of 0.07, these made little difference and were retained. The Kolmogorov-Smirnov test of normality was significant at less than .05, showing that the assumption of normality was violated. The histogram showed, as expected, a slightly negative skew. Using the ratio of skewness and kurtosis divided by their standard errors, the kurtosis was within normal range of -2 to +2, although the skewness was a little stronger, ranging from 4.4 to 5.1. The skewness was -4.30. However, the Q-Q plots were relatively normal.

As perceived responsibility was hypothesised to be related to attributions and emotions, tests for linearity showed some linear relationship between responsibility and anger and attributions of internal controllability and locus. However, there was also some heteroscedasticity.
Outliers

An examination of boxplots revealed a substantial amount of outliers for emotions felt towards the company (disappointment, relieved, surprised, shocked, satisfied, dislike and contempt) and for emotions felt towards the service (concerned, enjoyment, worried, insecure, apprehensive, uneasy, scared, glad, fearful and contented). There were extreme scores for dislike and worried. However, for all emotion variables with outliers or extreme scores, the calculation of the differences between the means and the 5% trimmed means showed little difference (0.11 or less for various emotions, below the .4 area of concern), indicating that outliers did not have a substantial impact on the means. Therefore, they were retained.

Normality of distribution

The histograms revealed, as expected, some positive skewness for the negative emotions and negative skewness for the positive emotions. Examination of the normal probability plots (Q-Q plots) showed that most scores appeared to be fairly normally distributed along the expected normal value line, except for “emotions to the company” of relieved, satisfied, liking and “emotions to service use” of concerned, worried, insecure and glad. The ratio of skewness was estimated by dividing both skewness and kurtosis by their standard errors, to identify variables outside the normal range of -2 to +2 (Coakes & Steed, 2003). For glad, the skewness and kurtosis estimation were within normal range. For relieved, liking, concerned, worried and insecure, the skewness ratio was strong (above -6) although the kurtosis for each of these was within normal range. For satisfied, both the ratios for skewness and kurtosis were strong at 10.66 and 8.113. No transformations were considered, congruent with Tabachnik and Fidell’s (2001) recommendation. Tests for linearity found some strong relationships, as predicted, between emotions and behaviour e.g., anger and switching and loyalty. Heteroscedasticity was also found.
6.2.12 Assumptions of Normality for Behaviour

Outliers

As examination of boxplots revealed outliers for some behaviours – a, b, d, p, q, r, s – most being for the behaviours of word-of-mouth activity and contagion, but no extreme scores. However, examination of the means and the 5% trimmed means for all the affected behaviours shows a difference of 0.12 or less, indicating that outliers do not have a substantial impact on the means. These were therefore retained.

Distribution

In looking at normality of distribution, the histograms revealed, as expected, that most behaviours had a positive or negative skew. For all behaviours, the Kolmogorov-Smirnov test of normality showed results below the .05 level of significance, indicating that the assumption of normality was violated. Examination of the normal probability plots (Q-Q plots) showed that some scores for behaviours were not normally distributed along the expected normal value line. Estimations of skewness and kurtosis were made and all behaviours (except h and p) were outside the normal range of -2 to +2, with the most severe skewness being for behaviours a, d, k, l, q, r and s. Congruent with Tabachnik and Fidell’s (2001) recommendation, transformations were not carried out.

6.2.13 Assumptions of Normality for Attitude

The attitude construct contained three items. The boxplots showed a couple of outliers for one item, but the difference between the means and the 5% trimmed means showed that these had minimal impact. The Kolmogorov-Smirnov test of normality were all significant at less than .05, showing that the assumption of normality was violated. While the histograms showed a slight positive skew, as expected, an examination of the ratio of skewness and kurtosis to their standard errors for each item was either within or close to the normal range (-2 to + 2).
## 6.3.1 Factor Analysis of the Involvement Scale

Factor Matrix (a)

<table>
<thead>
<tr>
<th>Factor</th>
<th>involvement - RS</th>
<th>involvement - RS</th>
<th>involvement - RS</th>
<th>involvement - RS</th>
<th>involvement - RS</th>
<th>involvement - RS</th>
<th>involvement - RS</th>
<th>involvement - RS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.886</td>
<td>0.854</td>
<td>0.842</td>
<td>0.830</td>
<td>0.821</td>
<td>0.814</td>
<td>0.809</td>
<td>0.768</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Axis Factoring.
a 1 factors extracted. 4 iterations required.
### 6.3.2 Post-Hoc Factor Analysis of Attribution and Attribution-Like Items

As there were 15 items, the required sample of five participants per item was more than met. The measure of sampling adequacy, the Kaiser-Meyer-Olkin Measure, was .864, above the recommended value of .6 (Tabachnik & Fidell, 2001) and Bartlett’s Test of Sphericity was significant \( p \leq .001 \). Visual inspection of the correlation matrix showed substantial numbers of correlations greater than .30, indicating a factor analysis was justified (Hair et al., 1998). Additionally, this inspection revealed that no correlations approached one, indicating that there was no singularity or extreme multicollinearity (Hair et al., 1998).

The scree plot showed a change in direction at the point above the fifth factor, also indicating a 4-factor solution. Examination of total variance indicated that four factors had eigenvalues above 1. As these accounted for 61.29% of the total variance, the solution is considered to be good.

An examination of communalities showed that several items had loadings below the .4 level at which a variable is usually retained: two externally controllable attributions, one locus attribution, and accountability. In addition, the attribution of foreseeability and intentionality had extremely low communalities (.193 and .005 respectively). The factor matrix showed four complex items and revealed that intentionality did not load on any factor, a result that replicated the findings in the FA of the entire questionnaire. Thus an oblique rotation was conducted with intentionality removed. The resulting factor matrix yielded one complex item and showed a clear separation of constructs, but also showed that foreseeability loaded on no factors. Thus another oblique rotation was conducted with foreseeability removed. The result showed no complex items. Thus intentionality and foreseeability were removed from further analysis.

In Factor 1, the three items for attribution of internal controllability clustered with two attributions of locus items (internal/external) and the accountability item. Factor 2 (external controllability) showed the three attributions of external controllability clustering together. Factor 3 (locus) showed one attribution of locus. Factor 4 (responsibility) showed the three responsibility items clustering (see Table 69).

**Table 69 Pattern Matrix for attribution items**

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>attribution - int/controllable RS 4</td>
<td>.896</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution - int/controllable RS 2</td>
<td>.727</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution - int/controllable RS 9</td>
<td>.648</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution - internal/external 5</td>
<td>-.566</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution - internal/external 7</td>
<td>-.469</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accountability</td>
<td>.323</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution - ext/controllable RS 6</td>
<td></td>
<td>.785</td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution - ext/controllable RS 3</td>
<td></td>
<td>.551</td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution - ext/controllable RS 8</td>
<td></td>
<td>.512</td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution - internal/external 1</td>
<td></td>
<td></td>
<td>.741</td>
<td></td>
</tr>
<tr>
<td>responsibility - b</td>
<td></td>
<td></td>
<td></td>
<td>.869</td>
</tr>
<tr>
<td>responsibility - c</td>
<td></td>
<td></td>
<td></td>
<td>.642</td>
</tr>
<tr>
<td>responsibility - a</td>
<td></td>
<td></td>
<td></td>
<td>.522</td>
</tr>
</tbody>
</table>


Rotation converged in 11 iterations.

This solution demonstrated that responsibility was a separate construct to other items. Regarding McAuley et al.’s (1992) 3 factor attribution scale, it highlighted that two items on the locus scale (reflects on an aspect of D.A., to do with something about D.A.) loaded on Factor 1, the internal controllability scale, while the third locus item (inside of D.A.) loaded separately on Factor 3. The Cronbach’s alpha of the locus scale was .68 in this study. As McAuley et al.’s (1992) 9-item attribution scale constituted an established and tested scale, further investigation was conducted as consideration was given to the notion that responses may have varied from scenario to scenario. The locus scale was therefore tested on the group who received the internal scenarios ($n = 155$), resulting in an improved Cronbach’s alpha of .70 (see Appendix 6.4.7). When tested on the group who received the external scenarios, this resulted in a reduced Cronbach’s alpha of .59 (see Appendix 6.3.8). Thus it is argued that the two locus attributions should be retained as part of the scale, especially as removal of the two attributions would result in unacceptably short scale.

Accountability appeared tied to internal controllability, which made conceptual sense as this had been predicted to overlap with this construct. The argument previously had been made in Chapter 2 for its existence and the decision was made to retain this item.
6.3.3 Factor Analysis of Emotions

Common factor analysis (Principal Axis Factoring or PAF) was used as the factors were correlated, as indicated from the general factor analysis. There were 32 emotion items, and the required sample of five participants per item was more than met. The measure of sampling adequacy, the Kaiser-Meyer-Olkin Measure, was .911, above the recommended value of .6 (Tabachnik & Fidell, 2001) and Bartlett’s Test of Sphericity was significant ($p \leq .001$). Visual inspection of the correlation matrix showed substantial numbers of correlations greater than .30, indicating a factor analysis was justified (Hair et al., 1998). Additionally, the inspections revealed that no correlations approached one, indicating no singularity or extreme multicollinearity (Hair et al., 1998).

Examination of total variance indicated that five factors had eigenvalues above 1. The scree plot showed a change in direction at the point above the sixth factor, also indicating a 5-factor solution. This number of extracted factors was congruent with Tabachnik and Fidell’s (2001) recommendation that the number of factors extracted should equal the number of variables (in this case 32) divided by 3 or 5 when there is a large sample size and the number of variables is between 20 and 50. As these five factors accounted for 61.60% of the variance, the solution was considered good. The five factors were, in order, fear, joy, sympathy (a renaming of sadness due to its content), surprise and anger. The love items were subsumed under other factors.

While there were communalities extracted a little below .4, these were retained as FA results in lower communalities than other analysis techniques for analysis like Principal Components Analysis. However, there were many complex items loading on two or more factors. As a result, an oblique rotation was conducted, with a 5-factor solution used. This yielded a solution with only one complex item, a joy item (enjoyment felt towards service use) which was correlated at .551 with factor 2 (joy) and at -.315 with factor 1 (fear). The factor correlation matrix indicated that factors 1 (fear) and 5 (anger) were substantially correlated at .502, above the satisfactory level of .3. Additionally, factors 1 (fear) and 3 (sympathy) were correlated at -.353. A 4-factor solution was tested and did not substantially improve outcomes, so the 5-factor solution was retained, especially as it made stronger conceptual sense (see Table 70 for 5-factor solution).
**Table 70 Pattern Matrix(a) for emotion showing 5-Factor solution.**

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>insecure - emotion to service use</td>
<td>.886</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>worried - emotion to service use</td>
<td>.880</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>scared - emotion to service use</td>
<td>.829</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fearful - emotion to service use</td>
<td>.809</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>uneasy - emotion to service use</td>
<td>.777</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>apprehensive - emotion to service use</td>
<td>.751</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>concerned - emotion to service use</td>
<td>.725</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>distressed - emotion to service use</td>
<td>.693</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unhappy - emotion to service use</td>
<td>.618</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfied - emotion to company</td>
<td></td>
<td>.743</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>glad - emotion to service use</td>
<td></td>
<td>.681</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>liking - emotion to company</td>
<td></td>
<td>.677</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>contented - emotion to service use</td>
<td></td>
<td>.645</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>enjoyment - emotion to service use</td>
<td></td>
<td>-.315</td>
<td>.551</td>
<td></td>
<td></td>
</tr>
<tr>
<td>relieved - emotion to company</td>
<td></td>
<td></td>
<td>.536</td>
<td></td>
<td></td>
</tr>
<tr>
<td>contented - emotion to company</td>
<td></td>
<td></td>
<td>.518</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sympathetic - emotion to company</td>
<td></td>
<td></td>
<td></td>
<td>.804</td>
<td></td>
</tr>
<tr>
<td>sorry - emotion to company</td>
<td></td>
<td></td>
<td></td>
<td>.675</td>
<td></td>
</tr>
<tr>
<td>compassion - emotion to company</td>
<td></td>
<td></td>
<td></td>
<td>.503</td>
<td></td>
</tr>
<tr>
<td>shocked - emotion to company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.595</td>
</tr>
<tr>
<td>amazed - emotion to company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.580</td>
</tr>
<tr>
<td>surprise - emotion to company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.516</td>
</tr>
<tr>
<td>annoyed - emotion to company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.624</td>
</tr>
<tr>
<td>outraged - emotion to company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.614</td>
</tr>
<tr>
<td>disgusted - emotion to company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.604</td>
</tr>
<tr>
<td>Emotion</td>
<td>Factor Load</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dislike - emotion to company</td>
<td>.584</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>contempt - emotion to company</td>
<td>.564</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unhappy - emotion to company</td>
<td>.559</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>frustrated - emotion to company</td>
<td>.557</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>angry - emotion to company</td>
<td>.475</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hopelessness - emotion to company</td>
<td>.459</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disappointed - emotion to company</td>
<td>.379</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


a Rotation converged in 15 iterations.
6.3.4 Factor Analysis of Behaviour with Attitude Included

As the attitude items were correlated with the behaviour items on the correlation matrix for the general questionnaire, and loaded with behaviour in the general EFA, the attitude and behaviour items were jointly factor analysed using common Factor Analysis (FA). The required sample of five participants per item was more than met as the sample size was 316 and there were 23 items (20 behaviour and three attitude). The measure of sampling adequacy, the Kaiser-Meyer-Olkin Measure, was .926, above the recommended value of .6 (Tabachnik & Fidell, 2001) and Bartlett’s Test of Sphericity was significant ($p \leq .001$). Visual inspection of the correlation matrix showed substantial numbers of correlations greater than .30, indicating a factor analysis was justified (Hair et al., 1998). Additionally, this inspection revealed that no correlations approached one, indicating that there was no singularity or extreme multicollinearity (Hair et al., 1998).

Examination of total variance indicated that four factors had eigenvalues above one. The scree plot showed a change in direction at the point above the fifth factor, also indicating a 4-factor solution. This number of extracted factors was congruent with Tabachnik and Fidell’s (2001) recommendation that the number of factors extracted should equal the number of variables (23 in total) divided by 3 or 5 when there was a large sample size and 20 to 50 variables. As these four factors Accounted for 68.37% of the total variance, the solution was considered to be good. The four factors for behaviour were identified in order as loyalty, complaining, word-of-mouth behaviour and switching behaviour, now renamed “withdrawal of custom” to more accurately reflect the constructs it included. The three attitude items were located under Factor 4, “withdrawal of custom”.

An examination of the correlation matrix indicated that behaviour d (contagion) did not correlate at .3 or above with any other variable. Additionally, its communality was .108, very substantially below the .4 level at which a variable is retained. This item was therefore dropped from the solution and from the questionnaire. Three other items had communalities below .4: behaviours h (switching), m (information-seeking) and t (loyalty: inertia). Because Principal Axis Factoring reduces communality scores, these items were retained.

As the Factor Matrix showed there were multiple complex items with significant loadings on more than one factor, an oblique rotation (due to expected correlations) using the 4-factor solution was conducted, with behaviour d (contagion) excluded from the analysis. See Table 71.
Table 71 Pattern Matrix for behaviour and attitude with behaviour d removed

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>behaviour s - loyalty</td>
<td>.899</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour p - loyalty</td>
<td>.896</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour q - loyalty</td>
<td>.878</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour r - loyalty</td>
<td>.839</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour o - loyalty</td>
<td>.672</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour t - loyalty (inertia)</td>
<td>.348</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour k - complain</td>
<td></td>
<td>.919</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour j - complain</td>
<td></td>
<td>.860</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour l - complain</td>
<td></td>
<td>.854</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour i - complain</td>
<td></td>
<td>.802</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour a - w-o-m</td>
<td></td>
<td></td>
<td>.902</td>
<td></td>
</tr>
<tr>
<td>behaviour b - w-o-m</td>
<td></td>
<td></td>
<td>.632</td>
<td></td>
</tr>
<tr>
<td>behaviour m - information seeking</td>
<td></td>
<td></td>
<td>.327</td>
<td>.425</td>
</tr>
<tr>
<td>behaviour e - w-o-m</td>
<td></td>
<td></td>
<td></td>
<td>.715</td>
</tr>
<tr>
<td>behaviour f - switching</td>
<td></td>
<td></td>
<td></td>
<td>.650</td>
</tr>
<tr>
<td>behaviour g - switching</td>
<td></td>
<td></td>
<td></td>
<td>.590</td>
</tr>
<tr>
<td>attitude a</td>
<td>.319</td>
<td></td>
<td></td>
<td>-.577</td>
</tr>
<tr>
<td>attitude c</td>
<td></td>
<td></td>
<td></td>
<td>-.562</td>
</tr>
<tr>
<td>behaviour n - loyalty</td>
<td>.348</td>
<td></td>
<td></td>
<td>-.560</td>
</tr>
<tr>
<td>attitude b</td>
<td>.312</td>
<td></td>
<td></td>
<td>-.551</td>
</tr>
<tr>
<td>behaviour h - switching -RS</td>
<td></td>
<td></td>
<td></td>
<td>.504</td>
</tr>
<tr>
<td>behaviour c - switching</td>
<td></td>
<td></td>
<td></td>
<td>.499</td>
</tr>
</tbody>
</table>


The pattern matrix yielded conceptually-sound factor loadings in 12 iterations resulting in four complex items of behaviours m and n and two attitude items. These were removed and the analysis rerun, indicating another complex item, attitude c. See Table 72.
Table 72 Pattern Matrix with complex items (attitudes a, b, and behaviours m, n) removed

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>behaviour s - loyalty</td>
<td>-.907</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour p - loyalty</td>
<td>-.897</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour q - loyalty</td>
<td>-.879</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour r - loyalty</td>
<td>-.857</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour o - loyalty</td>
<td>-.698</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitude c</td>
<td>-.421</td>
<td>-.334</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour t - loyalty (inertia)</td>
<td>-.359</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour k - complain</td>
<td>.943</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour j - complain</td>
<td>.873</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour l - complain</td>
<td>.869</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour i - complain</td>
<td>.810</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour a - w-o-m</td>
<td>.906</td>
<td>.636</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour b - w-o-m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour e - w-o-m</td>
<td>.733</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour f - switching</td>
<td>.708</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour g - switching</td>
<td>.592</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour c - switching</td>
<td>.498</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour h - switching -RS</td>
<td>.443</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Rotation converged in 6 iterations.

This again showed another complex item, attitude c. The factor analysis was then rerun with the attitude item removed. See Table 73.
Table 73 Pattern Matrix with complex item (attitude c) removed

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>behaviour s - loyalty</td>
<td>-.900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour p - loyalty</td>
<td>-.892</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour q - loyalty</td>
<td>-.876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour r - loyalty</td>
<td>-.852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour o - loyalty</td>
<td>-.695</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour t - loyalty (inertia)</td>
<td>-.358</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour k - complain</td>
<td></td>
<td>.941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour j - complain</td>
<td></td>
<td>.872</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour l - complain</td>
<td></td>
<td>.867</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour i - complain</td>
<td></td>
<td>.807</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour a - w-o-m</td>
<td></td>
<td></td>
<td>.907</td>
<td></td>
</tr>
<tr>
<td>behaviour b - w-o-m</td>
<td></td>
<td></td>
<td>.633</td>
<td></td>
</tr>
<tr>
<td>behaviour f - switching</td>
<td></td>
<td></td>
<td></td>
<td>.732</td>
</tr>
<tr>
<td>behaviour e - w-o-m</td>
<td></td>
<td></td>
<td></td>
<td>.720</td>
</tr>
<tr>
<td>behaviour g - switching</td>
<td></td>
<td></td>
<td></td>
<td>.582</td>
</tr>
<tr>
<td>behaviour c - switching</td>
<td></td>
<td></td>
<td></td>
<td>.496</td>
</tr>
<tr>
<td>behaviour h - switching -RS</td>
<td></td>
<td></td>
<td></td>
<td>.438</td>
</tr>
</tbody>
</table>


a Rotation converged in 6 iterations.

From this analysis, it was clear that the attitude and behaviour scales overlapped, and that the attitude scale was redundant.
6.3.5 Factor Analysis of the Behaviour Scale

Common factor analysis using PAF was again used as the factors were correlated. As there were 20 behaviour items and a large sample, the required sample of five participants per item was more than met. The measure of sampling adequacy, the Kaiser-Meyer-Olkin Measure, was .909 and Bartlett’s Test of Sphericity was significant \( p \leq .001 \). Visual inspection of the correlation matrix showed substantial numbers of correlations greater than .30. This inspection revealed that no correlations approached 1.

Examination of total variance indicated that four factors had eigenvalues above 1. The scree plot showed a change in direction at the point above the fifth factor, also indicating a 4-factor solution. This number of extracted factors was congruent with Tabachnik and Fidell’s (2001) recommendation\(^\text{11}\). As the four factors accounted for 69.27\% of total variance, the solution was considered good. The four factors were identified as loyalty, complaining, word-of-mouth behaviour and withdrawal of custom (a more accurate renaming of the switching behaviour). Three items had communalities below the recommended level of .4: behaviours h (switching), m (information-seeking) and t (loyalty: inertia), although as communalities are lower in factor analysis than Principal Components Analysis, these were retained.

As the Factor Matrix showed a number of complex items, an oblique rotation using the 4-factor solution was conducted, with behaviour d (contagion) excluded as it did not load on any factors (as per the general factor analysis). All variables were interpreted as they had loadings of .32 or above on the pattern matrix (Tabachnick & Fidell, 2001). The oblique rotation yielded a solution with two complex items, behaviour m (information-seeking) and n (a loyalty item). As a result, behaviours m and n were removed from the analysis and from the questionnaire and the analysis re-run. (See results in Table 74).

\(^{11}\) That the number of factors extracted should equal the number of variables (20) divided by 3 or 5 when there is a large sample size and 20 to 50 variables.
Table 74 Pattern matrix for Behaviour with complex items m and n removed (d previously removed).

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>behaviour s - loyalty</td>
<td>-.900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour p - loyalty</td>
<td>-.892</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour q - loyalty</td>
<td>-.876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour r - loyalty</td>
<td>-.852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour o - loyalty</td>
<td>-.695</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour t - loyalty (inertia)</td>
<td>-.358</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour k - complain</td>
<td>.941</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour j - complain</td>
<td>.872</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour l - complain</td>
<td>.867</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour i - complain</td>
<td>.807</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour a - w-o-m</td>
<td>.907</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour b - w-o-m</td>
<td>.633</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour f - switching</td>
<td>.732</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour e - w-o-m</td>
<td>.720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour g - switching</td>
<td>.582</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour c - switching</td>
<td>.496</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>behaviour h - switching -RS</td>
<td>.438</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


a Rotation converged in 6 iterations.
Appendix 6.4 Pilot 1 Multivariate Assumptions Regarding Mahalanobis Distance and Outliers

The analysis indicated that the value of the maximum Mahalanobis distance was 44.967. Using the alpha level of .001 indicated by Coakes and Steed (2003), the critical value of the chi-square for the 17 variables entered was 42.312, indicating the presence of multivariate outliers. An examination indicated that four participants (subject numbers 151, 158, 229 and 290) had scores higher than the critical value. Participants 151 and 190 showed up as multivariate outliers on examination of the boxplots (participant 151 on negative affectivity on the combination of Crisis 2/1 Account 1 and participant 290 on the internal/external attribution on Crisis 2/3 and Account 3). The other two participants did not show up as outliers on the boxplots, so it may have been their combination of scores that resulted in their identification as outliers.
Appendix 6.5 Pilot 1 Test 1 Box Plots and Means Plots for the Results of the Two Crisis Types: Manipulation Check

Crisis type - internal/external

Crisis type - controllable/uncontrollable/ambiguous
Appendix 6.6 Pilot 1 Test 2: Post-hoc ANOVA for Controllability Crisis following MANOVA

For the internally controllable attribution, there was a statistically significant difference at the \( p < .05 \) level in scores. Post-hoc comparisons using the Tukey HSD indicated that the mean score for the controllable crisis (\( M = 5.65, SD = 1.03 \)) was significantly different from the uncontrollable crisis (\( M = 4.77, SD = 1.21 \)) and the ambiguous crisis (\( M = 4.83, SD = 1.22 \)), but the uncontrollable crisis did not differ from the ambiguous crisis.

For responsibility, there was a statistically significant difference at the \( p < .05 \) level in scores. Post-hoc comparisons using Tukey's HSD test indicated that the mean score for the controllable crisis (\( M = 5.53, SD = 1.14 \)) was significantly different from the uncontrollable crisis (\( M = 4.66, SD = 1.18 \)) and the ambiguous crisis (\( M = 4.72, SD = 1.20 \)), but the uncontrollable crisis did not differ from the ambiguous crisis.

For sympathy, there was a statistically significantly difference at the \( p < .05 \) level in scores. Post-hoc comparisons using the Tukey HSD and Scheffe tests indicated that the mean score for the controllable crisis (\( M = 3.32, SD = 1.49 \)) was significantly different from the uncontrollable crisis (\( M = 4.07, SD = 1.20 \)) and the ambiguous crisis (\( M = 4.19, SD = 1.42 \)), but the uncontrollable crisis did not differ from the ambiguous crisis.
Appendix 6.7 Pilot 1 Test 2: Means Plots for Variables Showing Sig. Difference for the Locus Crisis

Appendix 6.8 Pilot 1 Test 5: Means Plots for Variables Showing Sig. Difference for the Controllability Crisis
Crisis type - controllable/uncontrollable/ambiguous

Mean of internally controllable total RS

<table>
<thead>
<tr>
<th></th>
<th>Controllable</th>
<th>Uncontrollable</th>
<th>Ambiguous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.8</td>
<td>5.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Mean</td>
<td>5.2</td>
<td>5.0</td>
<td>4.8</td>
</tr>
<tr>
<td>Mean</td>
<td>4.8</td>
<td>4.6</td>
<td></td>
</tr>
</tbody>
</table>

Mean of Responsibility - total

<table>
<thead>
<tr>
<th></th>
<th>Controllable</th>
<th>Uncontrollable</th>
<th>Ambiguous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.6</td>
<td>5.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Mean</td>
<td>5.0</td>
<td>4.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean of sympathy total to company (emotion)

<table>
<thead>
<tr>
<th></th>
<th>Controllable</th>
<th>Uncontrollable</th>
<th>Ambiguous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.4</td>
<td>4.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Mean</td>
<td>3.8</td>
<td>3.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Mean</td>
<td>3.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Crisis type - controllable/uncontrollable/ambiguous
Appendix 6.9 Pilot 1 Test 3: Results of MANOVA of all IVs on the Hypothesised DVs

Preliminary assumption tested was conducted to check for normality, linearity, univariate outliers, homogeneity of covariance matrices and multicollinearity, showing no serious assumption violations. Four multivariate outliers had previously been removed from the analysis. Box’s M test and Levene’s test of equality of error variances were not violated.

There were no significant interactions between any of the independent variables. However, there was a main effect for Locus Crisis and Controllability Crisis types, but not for Accounts (see Table 75).

<table>
<thead>
<tr>
<th>IV</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>Partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account</td>
<td>44, 1040</td>
<td>1.251</td>
<td>.139</td>
<td>.051</td>
</tr>
<tr>
<td>Locus Crisis</td>
<td>11, 257</td>
<td>3.342</td>
<td>.000</td>
<td>.125</td>
</tr>
<tr>
<td>Controllability Crisis</td>
<td>22, 514</td>
<td>2.671</td>
<td>.000</td>
<td>.103</td>
</tr>
</tbody>
</table>
Appendix 6.10 Pilot 1 Test 6: Checking Pearson Coefficients for Demographic Variables of Mood, NA and PA

### Correlations

<table>
<thead>
<tr>
<th></th>
<th>Mood total</th>
<th>total PA</th>
<th>total NA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mood total</strong></td>
<td>1</td>
<td>.317**</td>
<td>-.334**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>282</td>
<td>282</td>
<td>279</td>
</tr>
<tr>
<td><strong>total PA</strong></td>
<td>.317**</td>
<td>1</td>
<td>-.297**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>282</td>
<td>312</td>
<td>309</td>
</tr>
<tr>
<td><strong>total NA</strong></td>
<td>-.334**</td>
<td>-.297**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>279</td>
<td>309</td>
<td>309</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
D.A. CEO DENIES RESPONSIBILITY FOR AIR CRASH

In a statement today, Domestic Airlines’ Chief Executive Officer denied any responsibility for the airlines’ 737 crash last Monday.

CEO, Pat Carney, denied the crash was the company’s fault.

“The crash was caused by some factors outside Domestic Airlines’ control.”

“It is not the fault or responsibility of Domestic Airlines,” Carney said.
Appendix 6.12 Pilot 2: Manipulation Check for Accounts

After re-examining theory, responsibility-based statements that underpin each of the Accounts were used. This new manipulation check reads as follows starting with the Account of “no comment” then “denial”, “excuse”, “justification”, and confession.

1. Which of the following statements best describes the announcement that Domestic Airline’s CEO, Pat Carney, made in the second story? Please circle one answer only. The CEO…

   a. Avoided making a statement about the company’s responsibility for the crash
   b. Denied the company’s responsibility for the crash
   c. Tried to minimise the company’s responsibility by placing blame on others
   d. Tried to downplay the harm that was associated with the crash
   e. Admitted full responsibility for the crash
Appendix 6.13 Pilot 2: Credibility Scale

Several credibility scales were identified and justification is made for use of the scale by Kent and Allen (1994, in Bruner II et al., 2001) as it was deemed most suitable to apply to the different Accounts.

Kamins, Folkes and Perner (1997) used a 2-item, 7-point scale that had a Cronbach’s alpha of .83. As the items used were “How credible is it that...” and “How likely is it that...”, this was not suitable for use without alteration.

Petruvu and Lord (1994) used a 4-item scale on Advertisement Credibility that had a Cronbach’s alpha of .81. Its items were: “The claims in the ad are true;” “I believe the claims in the ad;” “the ad is sincere;” “I think the ad is dishonest”. Again, this was not suited for use without alteration.

Kent and Allen (1994, in Bruner II et al., 2001) used a 3-item scale on Credibility of the Advertising Claim which had a Cronbach’s alpha of .85. It was measured on a 7-point semantic differential scale which said:

"I felt that the claim that ____ was:
1. not plausible…….plausible
2. Not credible…..credible
3. Didn’t make sense…….did make sense.

This scale was selected as it was deemed the most suitable to use with Account. For ease of understanding, “plausible” was changed to “believable”.
Appendix 6.14 Pilot 2: New Crisis Type Story with Adjustments

The

Sunday News

October 26, 2003

AIRLINE MAINTENANCE CREW SABOTAGE CAUSED AIR TRAGEDY

Investigations into last week’s Brisbane air crash involving a Domestic Airlines’ 737 a week ago pinned pointed engine sabotage by a long-term maintenance crew member as the most likely crash cause.

The National Accident Authority’s Chief Investigator, Chris Jones, said police are expecting to lay charges later today against a Domestic Airlines’ employee currently held for questioning.

Jones said that a review of Domestic Airlines’ security procedures found that it used current industry best practice in all its security measures.

“This indicated that the crash was not under Domestic Airlines’ control,” Jones said.

The crash death toll has climbed to 33 following the death of another passenger from injuries. There were 42 survivors.

The plane, en route to Sydney, crashed shortly after take-off from Brisbane Airport.

A DA pilot warned passengers to brace for an emergency landing after announcing that the right engine had failed.

Shortly after, the plane plummeted to the ground.

DOMESTIC AIRLINES’ CHIEF DENIES ANY RESPONSIBILITY FOR CRASH

See story page 2
The un summated data were analysed first. The Kolmogorov-Smirnov and the Shapiro-Wilks tests of normality both showed significant results ($p < .05$) for almost all 61 questionnaire items (excluding the two manipulation checks), indicating skewness and kurtosis. Further checks for skewness and kurtosis were made by examining the descriptive information, histograms with the normal distribution overlaid and normality plots (Q-Q plots in SPSS). As per Pilot 1, skewness was in the expected direction. Despite identifying both strong skewness and kurtosis in some variables (satisfied, worried, glad), these items were not transformed as per Tachnick and Fidell’s (2001) recommendations.

Boxplots were next examined for outliers and extreme scores. Several were identified in attribution a and b (locus and controllability), and emotions of astounded, frustrated, worried and uneasy. An examination of the differences between the means and the trimmed means for these items showed differences of 0.15 or less, indicating that these outliers and extreme scores did not substantially impact results, so they were retained.

The assumption of linearity was assessed for relationships between variables. As these were numerous, screening all possible pairs was not possible, therefore, as recommended by Tabachnik and Fidell (2001), skewed pairs likely to depart from linearity were assessed. Multiple bivariate scatterplots between two variables demonstrated some heteroscedasticity with non-linear and bulging data distribution. As heteroscedasticity is not fatal to ungrouped data (Tabachnik & Fidell, 2001), no data transformations were carried out.

**Missing Data**

An analysis of missing data showed that the amount of missing data was below the 5% mark considered significant (Tabachnik & Fidell, 2001), with most respondents answering all questions and only 24 data points in total missing. One exception was the emotion of “relieved” which showed three missing answers out of the 60 participants, i.e. 5%. Almost all missing data (19 data points) were emotion items, a trend not evident in Pilot 1.
Appendix 6.16 Pilot 2: Creation of a New Word-of-mouth Scale

In the factor analysis of Pilot 1, congruent with the findings of Zeithaml, Berry, and Parasuraman (1996), the positive word-of-mouth items (o, p and q) loaded on the loyalty factor. These items were (o) say positive things about the airline, D.A. to other people; (p) recommend DA to someone who seeks your advice; and (q) encourage friends and relatives to do business with the company. Additionally, the negative word-of-mouth item (e) loaded on the withdrawal of custom factor. This item stated: convince friends and relatives not to fly with the airline, DA. As a result, these items were deleted.

After factor analysis, this left a 2-item scale (items a and b on the questionnaire) known as “word-of-mouth activity”, (a) talk about this with friends and relatives and (b) talk about this with other airline customers. While this scale had an acceptable Cronbach’s alpha, theoretically, both positive and negative word-of-mouth items are generally expected to form part of a word-of-mouth scale. Thus the decision was made to identify two new “positive word-of-mouth” items and two new “negative word-of-mouth” items, in addition to an extra “word-of-mouth activity” item in the event that the positive and negative items loaded again on loyalty or withdrawal of custom. Thus a series of scales were examined.

Positive WOM.

Scales identified as positive WOM mainly involved recommending the company or saying positive things. These were:
(a) recommending the company
“I would recommend this firm to others” (Goodwin & Ross, 1992).
“What is the likelihood that you would recommend our hotel to friends or colleagues?” (Hartline & Jones, 1996). However, this was similar to question p which clustered with loyalty.
“What is the likelihood that you would recommend the service to a friend?” (Maxham III, 2001). Again, this was similar to question p.
Item p from Zeithaml et al (1996) was “Recommending the company to someone who seeks advice”. Thus an option is:
“How likely is it that you would recommend this airline to friends or family?”
(b) saying positive things
Did you tell others mostly positive things about the product?” (Swan & Oliver, 1989 in Walker, 2001). This was similar to question o which clustered with loyalty.
Question “o” from Zeithaml et al.(1996) was “Saying positive things about the company”. Thus an option is: “Tell others mostly positive things about the airline or its service”.

Negative WOM.
This involved not recommending the company and speaking of dissatisfaction.
(a) not recommending the company
“Did you tell others mostly negative things about the product?” (Swan & Oliver, 1989 in Walker, 2001).
This could be changed to: “How likely is it that you would “tell others mostly negative things about the airline, D.A”.

(b) Dissatisfaction
These items included:
“Telling at least one friend or acquaintance about the dissatisfaction (Richins, 1983)
This could be altered to:
“Tell others how badly you thought of the company, D. A.”.

Word-of-mouth activity.

A literature search revealed Harrison-Walker (2001) factor analysed 13 WOM items to create a new one factor, a 4-item scale describing what she called “word-of-mouth activity”. This was similar to my items a and b on my questionnaire, but included questions about how often WOM communication takes place, the number of people to whom the sender communicates, and the quantity of information. Harrison-Walker (2001) also suggested WOM favourability as a different construct.

This was congruent with Halstead’s (2002) findings on WOM extent and WOM favourability. WOM extent was measured as the “number of people told about the carpet consumption experience”. This variable was operationalized as an ordinal measure (i.e., consumers indicated that they told one, two, three, or four or more people about their carpet
experiences). (Halstead, 2002) WOM favorability was assessed using a 5-point scale ranging from 1 = "very negative" to 5 = "very positive" (Halstead, 2002).

For selection of a new WOM activity item to be added to the scale to create a 3-item scale: “how likely is it that you would discuss this with others in the following week?”

The final additions to the scale were therefore:

WOM activity
“Discuss this with others in the following week?” (now item n)

Positive WOM
“Recommend this airline to friends or family?” (now item h)
“Tell others mostly positive things about the airline or its service?” (now item o)

Negative WOM
“Tell others how badly you thought of the airline, D. A.?” (now item d)
“Tell others mostly negative things about the company, D.A.?” (now item m)
Appendix 6.17 Pilot 2: Means Plot for Credibility of Accounts

<table>
<thead>
<tr>
<th>Account type</th>
<th>Mean of credibility-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No comment</td>
<td>3.0</td>
</tr>
<tr>
<td>Denial</td>
<td>3.2</td>
</tr>
<tr>
<td>Excuse</td>
<td>3.4</td>
</tr>
<tr>
<td>Justification</td>
<td>3.6</td>
</tr>
<tr>
<td>Confession</td>
<td>4.0</td>
</tr>
</tbody>
</table>
CEO APOLOGISES, TAKES FULL RESPONSIBILITY FOR AIR CRASH

Domestic Airlines’ Chief Executive Officer today apologised and confessed full responsibility for the airlines’ 737 crash last Monday.

CEO, Pat Carney, said the company was very sorry and expressed deep sympathy to the victims’ families.

“We must accept all responsibility for the consequences of the crash,” Carney said.

“We will do everything we can to compensate those affected.

“We will ensure something like this never happens again,” Carney said.
D.A. CEO TAKES FULL AIR CRASH RESPONSIBILITY

Domestic Airlines’ Chief Executive Officer today apologised and accepted full responsibility for the airlines’ 737 crash last Monday.

CEO, Pat Carney, said the company was very sorry and expressed deep sympathy to the victims’ families.

“We must accept all responsibility for the consequences of the crash,” Carney said.

“We will do everything we can to compensate those affected.

“We will ensure something like this never happens again,” Carney said.
Appendix 6.19 Pilot 3: Adjusted and New Manipulation Checks for Accounts

1. For each statement below, please circle the number on each scale that best represents your view. I believe that in the second newspaper story, DA’s CEO, Pat Carney…

![Scale with numbers from 1 to 7]

a. avoided making any comment about the company’s responsibility for the crash
b. denied the company’s responsibility for the crash
c. tried to reduce the company’s responsibility by blaming others for the crash
d. tried to reduce the company’s responsibility by playing down the amount of injuries that occurred
e. admitted full responsibility for the crash

3. Please select one statement that best summarises your view of what the CEO said. The CEO…

a. was trying to shift blame for the crash away from DA
b. made a full apology for the crash
c. did not respond to the media inquiry
d. said that the crash wasn’t as bad as it could have been
e. said that DA had nothing to do with the cause of the crash
6.20.1 Means Plot for No Comment

6.20.2 Means Plot for Denial

6.20.3 Means Plot for Excuse

6.20.4 Means Plot for Justification
6.20.5 Means Plot for Confession
Appendix 6.21 Pilot 4: Low Injury No-photograph Treatment Condition

The
Sunday News

October 26, 2003
$1.80 inc. GST

AIRLINE’S NEGLECTED ENGINE MAINTENANCE CAUSED AIR DISASTER

Last of 33 injured leaves Brisbane hospital

Investigations into last week’s Brisbane air crash involving a Domestic Airlines’ 737 pinpointed the airline’s neglected engine maintenance as the most likely crash cause.

The National Accident Authority’s Chief Investigator, Chris Jones, said that Domestic Airlines’ records showed that it had failed to carry out an important engine safety service for that particular plane.

Jones said the company had slashed numbers of maintenance crew in the previous six months as a cost-cutting measure.

“This indicated that the crash was under Domestic Airlines’ control,” Jones said.

There were 33 passengers injured, none seriously, while 42 passengers were unharmed. The last passenger has been released from hospital.

The plane, en route to Sydney, crashed shortly after take-off from Brisbane Airport.

A DA pilot warned passengers to brace for an emergency landing after announcing that the right engine had failed.

Shortly after, the plane plummeted to the ground.

DOMESTIC AIRLINES’ CHIEF DOWNPLAYS SEVERITY OF CRASH

See story page 2
Appendix 6.22 Pilot 4: Account Manipulation Check Expanded from Pilot 3

For each statement below, please circle the number on each scale that best represents your view. I believe that in the second newspaper story, DA’s CEO, Pat Carney…

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>a  made a full apology for the crash</td>
<td>1</td>
</tr>
<tr>
<td>b  was trying to shift blame for the crash away from DA</td>
<td>2</td>
</tr>
<tr>
<td>c  did not respond to the media inquiry</td>
<td>3</td>
</tr>
<tr>
<td>d  said that the crash could have had a worse outcome</td>
<td>4</td>
</tr>
<tr>
<td>e  said that DA had nothing to do with the cause of the crash</td>
<td>5</td>
</tr>
</tbody>
</table>

not at all  very much
Appendix 6.23 Pilot 4: Means Plots for Impact of Photograph Use on TwoHarm Levels

Crisis type (all int/cont)

Mean of Critical injury level

Crisis type (all int/cont)

Mean of Crash severity
Appendix 6.24 Pilot 4: Means Plots for Accounts Against the Manipulation Check

6.24.1 Means Plot for Account of No Comment

6.24.2 Means Plot for Account of Denial

6.24.3 Means Plot for Account of Excuse

6.24.4 Means Plot for Account of Justification
6.24.5 Means Plot for Account of Confession
Firstly, mood, NA and PA were predicted to impact emotions. Yet an examination of the relationship using scatterplots and Pearson product-moment correlation coefficients showed no linear relationships and no significant correlations. Thus, the relationship predicated by Affective Events Theory was not supported and these constructs were removed.

Attributions of foreseeability and intentionality were removed because, in the general exploratory factor analysis both intentionality and foreseeability had low communalities and intentionality did not load on any factor. Next, in the post-hoc factor analysis with other attribution items, these both had extremely low communalities and did not load on any factor.

The emotion scale was hypothesised to have six emotion categories (anger, fear, joy, love, surprise, and sadness), but love was dropped in Pilot 1 after the exploratory factor analysis, while sadness was changed to sympathy.

In Pilot study 1, the behavioural intent scale had devolved after factor analysis from a 6-factor to a 4-factor scale measuring loyalty, withdrawal of custom (previously “switching”), complaining and word-of-mouth behaviour (WOM). WOM proved problematic and required new items for Study 3.

The Attitude scale was removed when it loaded with behaviour items in the Pilot 1 factor analysis. Thus a new scale was required for Study 3.
Appendix 7.1 Evaluation of Attitude Scales

7.1.1 Evaluation of Alternate Attitude Scales

In evaluating attitude scales, scales by Homer (1995) and Hui, Dubé and Chebat (1997) were revisited and five new scales were located. These are now discussed.

- Lord, Lee and Sauer (1994, in Bruner II & Hensel, 1998) in their measurement of attitude towards the object reported an alpha of .89 for their 3-item semantic differential scale. It measured how much a person liked a radio program: bad-good; unfavourable-favourable; unpleasant-pleasant. (The first two items appeared on the previously used 3-item attitude scale.)

- Batra and Ahtola (1988, in Bruner II & Hensel, 1998)’s 6-item scale, which measured the pleasure-related aspect of a consumer’s attitude toward a specific product, had an alpha coefficient of .96. It measured the three items in the Stafford (1996) scale bad-good, unfavourable-favourable, negative-positive plus disagreeable-agreeable, pleasant-unpleasant and dislike-like.

- Schmitt, Pan and Tavassoli (1994, in Bruner II, James & Hensel, 2001) measured attitude towards the brand name, reporting an alpha of .97 for this 6-item semantic differential scale: How acceptable do you think ……is? Negative-positive; bad-good; unpleasant-pleasant; dislike-like; disagreeable-agreeable; not at all acceptable-very acceptable (The first two items appeared on the previously used 3-item attitude scale).

- Peterson, Wilson and Brown (1992, c.f. Bruner II & Hensel, 1998) measured attitude towards the company in the ad, reporting a Cronbach’s alpha of .91 for this 3-item semantic differential scale: reputable-not reputable; customer-oriented-not customer oriented; unique-not unique.

- Milliman, Fugate and Afzalurrahim (1991, in BrunerII & Hensel, 1998) measured attitude toward the advertiser, specifically, perception of professional competence. Cronbach’s alpha was reported to be .81 for this 6-item 7-point scale anchored by strongly disagree-strongly agree: Professional ability, reputation, quality of service, general impression, trust, likeability.
7.1.2 The Final Attitude Scale Used

The 6-item scale by Milliman, Fugate and Afzalurrahim (1991, in Bruner II & Hensel, 1998) was selected for use as it was more applicable to company crises scenarios, however, one item from Peterson, Wilson, and Brown (1992, in Bruner II & Hensel, 1998) was included in the scale: customer-oriented.

For each statement below, please circle the number that best describes your attitude towards the airline company, DA. I would rate DA highly for its….

<table>
<thead>
<tr>
<th></th>
<th>not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>professional ability</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>reputation</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>quality of service</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>overall general impression</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>trustworthiness</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>likeability</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>customer orientation</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Appendix 7.2 The New Items for the Negative Word-of-Mouth Scale

These questions were worded:

Keeping in mind the two newspaper stories you read earlier in the booklet, and imagining that you, or those close to you, frequently fly with the airline DA, for each statement below, please circle the number that best indicates how likely it is that you would…

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>warn your friends and relatives not to use DA</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>make sure to tell your friends and relatives not to fly with DA</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>complain to your friends and relatives about DA</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 7.3 Brisbane Electoral Districts

<table>
<thead>
<tr>
<th>Electorate</th>
<th>Number of voters</th>
<th>Number selected</th>
<th>Electorate</th>
<th>Number of voters</th>
<th>Number selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albert</td>
<td>28478</td>
<td>82</td>
<td>Lockyer</td>
<td>26599</td>
<td>77</td>
</tr>
<tr>
<td>Algester</td>
<td>28339</td>
<td>82</td>
<td>Lytton</td>
<td>26972</td>
<td>78</td>
</tr>
<tr>
<td>Aspley</td>
<td>27142</td>
<td>78</td>
<td>Moggill</td>
<td>27506</td>
<td>80</td>
</tr>
<tr>
<td>Ashgrove</td>
<td>27346</td>
<td>79</td>
<td>Mt Coot-tha</td>
<td>27432</td>
<td>80</td>
</tr>
<tr>
<td>Brisbane Central</td>
<td>29145</td>
<td>84</td>
<td>Murrumba</td>
<td>29508</td>
<td>85</td>
</tr>
<tr>
<td>Bundamba</td>
<td>25094</td>
<td>73</td>
<td>Mt Gravatt</td>
<td>26531</td>
<td>77</td>
</tr>
<tr>
<td>Bulimba</td>
<td>26030</td>
<td>75</td>
<td>Mansfield</td>
<td>27376</td>
<td>78</td>
</tr>
<tr>
<td>Clayfield</td>
<td>26505</td>
<td>77</td>
<td>Mt Ommaney</td>
<td>26860</td>
<td>78</td>
</tr>
<tr>
<td>Chatsworth</td>
<td>29001</td>
<td>84</td>
<td>Nudgee</td>
<td>27057</td>
<td>78</td>
</tr>
<tr>
<td>Cleveland</td>
<td>27204</td>
<td>79</td>
<td>Redcliffe</td>
<td>27024</td>
<td>78</td>
</tr>
<tr>
<td>Capalaba</td>
<td>27060</td>
<td>78</td>
<td>Redlands</td>
<td>26337</td>
<td>76</td>
</tr>
<tr>
<td>Everton</td>
<td>27965</td>
<td>81</td>
<td>Stafford</td>
<td>26923</td>
<td>78</td>
</tr>
<tr>
<td>Ferny Grove</td>
<td>29682</td>
<td>86</td>
<td>Sandgate</td>
<td>26896</td>
<td>78</td>
</tr>
<tr>
<td>Greenslopes</td>
<td>27655</td>
<td>80</td>
<td>Springwood</td>
<td>26895</td>
<td>78</td>
</tr>
<tr>
<td>Inala</td>
<td>24514</td>
<td>71</td>
<td>Stretton</td>
<td>29266</td>
<td>84</td>
</tr>
<tr>
<td>Indooroopilly</td>
<td>26136</td>
<td>76</td>
<td>South Brisbane</td>
<td>28681</td>
<td>83</td>
</tr>
<tr>
<td>Kallangur</td>
<td>27143</td>
<td>78</td>
<td>Woodridge</td>
<td>24155</td>
<td>70</td>
</tr>
<tr>
<td>Kurwongbah</td>
<td>31511</td>
<td>91</td>
<td>Waterford</td>
<td>26166</td>
<td>76</td>
</tr>
<tr>
<td>Logan</td>
<td>26283</td>
<td>76</td>
<td>Yeerongpilly</td>
<td>27306</td>
<td>78</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,037,723</strong></td>
<td><strong>3,000</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 7.4 Example of Randomised Number Selection for Electorates – this for the Albert Electorate

133, 189, 496, 856, 911, 916, 1372, 1582, 1830, 2159, 2303, 2392, 3062, 3441, 3675, 3918, 4479, 4595, 4914, 5842, 6885, 6977, 7298, 7549, 7638, 8397, 10797, 10936, 11818, 11874, 12148, 12153, 12571, 12864, 13093, 13414, 13453, 13637, 14013, 14791, 15205, 15460, 15829, 16255, 16522, 16776, 17048, 17466, 17704, 17866, 18162, 18698, 18887, 19209, 19450, 19474, 20634, 20802, 20937, 20988, 21914, 22016, 22299, 22798, 22934, 23095, 23147, 23334, 24040, 24324, 24474, 24581, 24810, 26092, 26173, 26222, 26346, 26540, 27423, 27722, 28202, 28424
Appendix 7.5 Comparison of Respondents to Demographics of Brisbane Population

Of the 907 respondents, 39.5% were male and 60.4% female, which contrasts with figures from the Australian Bureau of Statistics 2001 census (A Statistical Portrait of Brisbane) which shows that Brisbane’s population consists of 49% males and 51% females. 97.9% identified themselves as belonging to an individualist culture (e.g., Australian, English) and 2.1% as belonging to a collectivist culture (e.g., New Zealand Maori, Vietnamese). This is similar to Brisbane’s population statistics (A Statistical Portrait of Brisbane) showing that a minimum of 2.9% may be identified as collectivists (Vietnamese-born, Chinese, indigenous). Respondents’ ages ranged from 18 to 95 (mean at 45.7 years), with proportions similar to that of the general population sample, although substantially more respondents were in the 45 to 54 age (see Table 76).

Table 76 Age of respondents and general population of Brisbane

<table>
<thead>
<tr>
<th>Age group</th>
<th>Respondents</th>
<th>Brisbane population</th>
</tr>
</thead>
<tbody>
<tr>
<td>To 24 years</td>
<td>11.2% aged 18-24</td>
<td>18% aged 15-24</td>
</tr>
<tr>
<td>24 to 34</td>
<td>15.2%</td>
<td>16%</td>
</tr>
<tr>
<td>35 to 44</td>
<td>20.4%</td>
<td>16.9%</td>
</tr>
<tr>
<td>45 to 54</td>
<td>25.6%</td>
<td>14.8%</td>
</tr>
<tr>
<td>55 to 64</td>
<td>15.5%</td>
<td>13.4%</td>
</tr>
<tr>
<td>65 to 74</td>
<td>8.1%</td>
<td>8.9%</td>
</tr>
<tr>
<td>75+</td>
<td>4%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

Level of completed education for respondents was slightly higher than the general population listed in the Australian Bureau of Statistics 2001 census statistics (A Statistical Portrait of Brisbane, n.d.) - see Table 77. Additionally, I did not collect data on the number of participants who may still have been high school students.

Table 77 Completed education for respondents and Brisbane population

<table>
<thead>
<tr>
<th>Highest education level completed</th>
<th>% of respondents</th>
<th>% of Brisbane population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Still at school</td>
<td>Not measured</td>
<td>50%</td>
</tr>
<tr>
<td>Primary school</td>
<td>3.3</td>
<td>Not measured</td>
</tr>
<tr>
<td>High school</td>
<td>32.2</td>
<td>Not measured</td>
</tr>
<tr>
<td>Certificate or trade certificate</td>
<td>21.6</td>
<td>13.3</td>
</tr>
<tr>
<td>Diploma, Advanced Diploma</td>
<td>12.6</td>
<td>6.9</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>19.5</td>
<td>14.4</td>
</tr>
<tr>
<td>Postgraduate qualifications</td>
<td>10.6</td>
<td>4.9</td>
</tr>
</tbody>
</table>
The income for respondents was similar to the Brisbane population distribution (A Statistical Portrait of Brisbane, n.d.), except that respondents had a slightly higher overall income, and a greater proportion of respondents were in high income brackets. I adjusted the ABS figures for inflation using the Reserve Bank of Australia’s statistics of 2.3% inflation in 2002 and 3% in 2003 (Measures of Consumer Price Inflation, n.d.), so figures used were to the closest approximate (see Table 78).

<table>
<thead>
<tr>
<th>Income range of respondents</th>
<th>% of respondents</th>
<th>Income range of Brisbane population</th>
<th>% of Brisbane population</th>
</tr>
</thead>
<tbody>
<tr>
<td>$14,999 or less</td>
<td>20.7</td>
<td>$10,999 or less</td>
<td>25</td>
</tr>
<tr>
<td>$15,000 - 24,999</td>
<td>12.9</td>
<td>$11,000 - 21,999</td>
<td>20</td>
</tr>
<tr>
<td>$25,000 – 34,999</td>
<td>14</td>
<td>$22,000 – 32,999</td>
<td>15.8</td>
</tr>
<tr>
<td>$35,000 - 49,999</td>
<td>18.3</td>
<td>$33,000 – 54,999</td>
<td>19.5</td>
</tr>
<tr>
<td>$50,000 – 74,999</td>
<td>16.8</td>
<td>$55,000 +</td>
<td>12.7</td>
</tr>
<tr>
<td>$75,000 – 99,999</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$100,000 – 149,999</td>
<td>4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$150,000+</td>
<td>2.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 7.6 Univariate Assumptions For Each Variable

7.6.1 Univariate Assumptions of Normality for the Involvement Items

For the four involvement items, the highest number of missing items was 25 out of 907 answers, representing 2.8% of the sample, and therefore below the 5% range of concern. The involvement items showed a small number of outliers (representing answers from three respondents) and extreme scores (representing answers from five respondents), but examination of differences between the group and trimmed means on all items showed a difference of 0.16 or less, indicating that these made little difference to the outcome. The outliers were retained. All involvement items were strongly negatively skewed with overall high means, as per Study 2. There was some kurtosis, and examination of the Q-Q normality plots showed some deviations from normal. However, no transformations were carried out. As involvement was hypothesised to influence the degree of emotional intensity, tests for linearity with emotions were randomly conducted and some slight linear relationships were indicated. This may have been due to the fact that the data consisted of results from 40 treatments, each expected to have different effects. Heteroscedasticity was found, but this is common in ungrouped data (Tabachnik & Fidell, 2001). Despite problems with the normality tests, no variables were transformed, as recommended by Tabachnik and Fidell (2001).

7.6.2 Assumptions of Normality for the Items Dealing with Attributions of Locus, Internal Controllability and External Controllability

The scale used for locus and controllability contained three items for each of the three constructs: locus (degree of internality/externality), internal controllability and external controllability. An examination of missing data for individual variables for the attributions showed that a maximum of .3 - 1.9% responses were missing (a maximum of 17 out of 907 potential answers), below the range of concern. An examination of the boxplots showed no outliers (all box and whiskers encompassed the full range of responses from 1 to 7). The Kolmogorov-Smirnov test of normality for all items was significant at less than .05, showing that the assumption of normality was violated. The histograms showed that attributions of internal controllability were strongly negatively skewed, while locus was positively skewed and external controllable appeared normally distributed. Using the ratio of skewness and kurtosis divided by their standard errors, most items were outside the normal range of −2 to +2 advised by Coakes and Steed (2003), and this was reflected in the Q-Q plots. Those items most affected were the three internal controllability items (with a negative skewness between -9.6 and -11.4, although the kurtosis was normal or close to normal for all three), the three locus items moderately (with all items having a positive skew of 5.5 – 8.2, and a strong negative kurtosis of...
between 4.72 to 7.07) and externally controllable items having a normal skew but a strong negative kurtosis (with the kurtosis on all items between –6.3 and –7.2). Items were not transformed, as recommended by Tabachnik and Fidell (2001).

As attributions influence emotions (with internally controllable attributions hypothesised to be related to negative emotions and externally controllable attributions expected to be related to positive emotions) bivariate tests for linearity were randomly conducted, revealing no clear linear relationships. Heteroscedasticity was found, but this is common in ungrouped data and is often related to sample size, especially when examining variance dispersion across groups (Hair et al., 1998). It is not too problematic in analyses of ungrouped data (Tabachnik & Fidell, 2001).

7.6.3 Assumptions of Normality for Accountability

The accountability construct contained only one item. An examination of missing data for individual attribution variables showed that 10 answers (1.1%) were missing, below the range of concern. Examination of the boxplot showed no outliers. The Kolmogorov-Smirnov test of normality was significant at less than .05, showing that the assumption of normality was violated. The histogram showed a strong negative skew, as expected. Using the ratio of kurtosis divided by its standard error, its kurtosis was 3.11, while the skew was very negative at -13.9. Although accountability was hypothesized as related to negative emotions, a random test with anger and fear did not show linearity.

7.6.4 Assumptions of Normality for Responsibility

The responsibility construct contained three items. Examination of missing data showed three to ten answers only missing (0.3 - 1.1% of total cases). Examination of the boxplots revealed no outliers, due to the “whiskers” encompassing the full range of scores. The Kolmogorov-Smirnov test of normality was significant at less than .05, showing that the assumption of normality was violated. The histogram showed, as expected, a negative skew. Using the ratio of skewness and kurtosis divided by their standard errors, the kurtosis was slightly negative but within normal range for items “a” (DA was responsible for the problem cause) and “c” (DA could have controlled the problem cause), but strong at -5.4 for item “b” (DA could have avoided the problem); skewness was strongly negative for all items, ranging between -6.1 and -10.6. However, the Q-Q plots appeared relatively normal.

As perceived responsibility was hypothesised to be related to attributions and emotions, randomly conducted tests for linearity showed heteroscedasticity (bulging distribution), which may occur when assumptions of normality are violated (Tabachnik & Fidell, 2001).
7.6.5 Assumptions of Normality for Emotion

Missing data

All missing data for emotions was below the 5% area of concern: for anger items, missing data ranged between 0.1 – 1.0%; for fear, 0.3 – 0.7%; for surprise, 0.7 – 1.0%; for sympathy, 0.2 – 1.9; for joy, 0.9 – 2.0%.

Outliers

Examination of boxplots revealed a small number of outliers for the emotion of joy felt towards the company (enjoyment, glad, contented, satisfied) and for one emotion of fear felt towards the service (concerned). For all other emotions, the box and “whiskers” extended the full breadth of the scale. However, the calculated differences between the means and the 5% trimmed means were substantially below the .4 area of concern, indicating that outliers did not have a substantial impact on the means and therefore were retained.

Normality of distribution

The histograms revealed, as expected, positive skew for the negative emotions and negative skew for the positive emotions. Examination of the normal probability plots (Q-Q plots) showed that most scores appeared to be fairly normally distributed along the expected normal value line, although there were multiple plots with uniform distributions. Estimations of skewness and kurtosis were made by dividing skewness by its standard error to identify those variables outside the normal range of -2 to +2 (Coakes & Steed, 2003).

As expected, for the anger emotions, the skewness and kurtosis were out of the normal range for “angry”, “annoyed”, “outraged”, “contempt”, “disgusted” and “frustrated” (see Table ). “Dislike” had a normal skewness and contempt a relatively normal skewness, but not a normal kurtosis. The Q-Q normality plots showed a uniform distribution (i.e., a flattened ‘S’ formation).

The fear emotions all showed negative skews. Those with a strong skew were “concerned”, “worried”, “apprehensive”, and “uneasy;” those with more moderate skews were “scared” and “fearful”, while one with a slight skew was “distressed”. Kurtosis was within normal range except for “scared”, “fearful” and “distressed” (Table 79). The Q-Q normality plots showed a uniform distribution except for “concerned”, “uneasy”, “apprehensive” and “worried”, each having a stronger curve above the normal line. However, these were not transformed, as earlier noted.
The surprise emotions all had negative skews, although “amazed” and “astonished” were close to normal range, and strong flattened kurtosis (see Table 79). The Q-Q plots showed fairly normal, if a little uniform, distributions.

The joy emotions all had strong positive skews, although most had a normal or relatively normal kurtosis, except for “glad” (See Table 79). The Q-Q normality plots showed a uniform distribution. No transformations were carried out. The Q-Q plots showed uniform distributions.

The sympathy emotions all had moderate positive skews and a negative kurtosis (see Table 79). The Q-Q plots showed fairly normal, if a little uniform, distributions. The Q-Q plots showed fairly uniform distributions.

Tests for linearity did not find strong relationships between emotions and behaviour. Heteroscedasticity was found, and could have been caused by the non-normality of many of the variables, and is not overly detrimental to ungrouped data (Tabachnik & Fidell, 2001).
<table>
<thead>
<tr>
<th>Table 79 Skewness and kurtosis estimates for all emotion items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skewness estimations</strong></td>
</tr>
<tr>
<td>Anger emotions</td>
</tr>
<tr>
<td>Angry</td>
</tr>
<tr>
<td>Contempt</td>
</tr>
<tr>
<td>Disgusted</td>
</tr>
<tr>
<td>Frustrated</td>
</tr>
<tr>
<td>Annoyed</td>
</tr>
<tr>
<td>Dislike</td>
</tr>
<tr>
<td>Outraged</td>
</tr>
<tr>
<td>Fear emotions</td>
</tr>
<tr>
<td>Concerned</td>
</tr>
<tr>
<td>Worried</td>
</tr>
<tr>
<td>Apprehensive</td>
</tr>
<tr>
<td>Uneasy</td>
</tr>
<tr>
<td>Scared</td>
</tr>
<tr>
<td>Fearful to service use</td>
</tr>
<tr>
<td>Distressed</td>
</tr>
<tr>
<td>Surprise emotions</td>
</tr>
<tr>
<td>Surprise</td>
</tr>
<tr>
<td>Astounded</td>
</tr>
<tr>
<td>Shocked</td>
</tr>
<tr>
<td>Amazed</td>
</tr>
<tr>
<td>Astonished</td>
</tr>
<tr>
<td>Joy emotions</td>
</tr>
<tr>
<td>Relieved</td>
</tr>
<tr>
<td>Contented</td>
</tr>
<tr>
<td>Enjoyment</td>
</tr>
<tr>
<td>Glad</td>
</tr>
<tr>
<td>Satisfied</td>
</tr>
<tr>
<td>Contented</td>
</tr>
<tr>
<td>Sympathy emotions</td>
</tr>
<tr>
<td>Compassion</td>
</tr>
<tr>
<td>Sympathetic</td>
</tr>
<tr>
<td>Sorry</td>
</tr>
<tr>
<td>Empathy</td>
</tr>
</tbody>
</table>
7.6.6 Assumptions of Normality for Behaviour

Missing data

All missing data for behaviour were below the 5% area of concern: for negative word of mouth, missing data ranged between 0.3 – 0.9%; for complaining, 0.7 – 1.1%; for withdrawal of custom, 0.3 – 1.1%; for loyalty, 0.4 – 1.1%

Outliers

As examination of boxplots revealed minimal outliers: one each for the three loyalty behaviours, “d”, “e” and “o” (see Table 80 for details), with no other outliers as the box and whiskers extended the full breadth of the scale. Calculations of differences between the means and the 5% trimmed means were substantially below the .4 area of concern, indicating that they did not substantially impact the means and therefore were retained.

Normality of distribution

The histograms revealed, as expected, that most behaviours had a positive or negative skew. Examination of the normal probability plots (Q-Q plots) showed a uniform distribution, with points slightly above and below the trend line.

Estimations of skewness and kurtosis were made by dividing the scores by their standard errors. Almost all behaviours were outside the normal range of -2 to +2 for skewness and/or kurtosis (Coakes & Steed, 2003). Withdrawal of custom and negative word of mouth generally had negative skews while loyalty and complaining had positive skews (see Table 80 for details).

All three negative word of mouth items had a strong negative kurtosis, while the skew was not within normal range for item “a” (see Table 80 for details). All complaining items had strong positive skews, while two (b, j) had a negative kurtosis outside normal range (see Table for details). For withdrawal of custom all had a moderately strong negative kurtosis, while two had moderately strong negative skews, “c’ in a negative direction, and “f” in a positive direction (see Table 80). All loyalty items had strong positive skews while the kurtosis was mostly in normal range or close to it. No transformations were carried out for reasons reported earlier.
Table 80 Skewness and kurtosis estimations for behavioural intention items

<table>
<thead>
<tr>
<th>Negative word of mouth items</th>
<th>Skewness estimations</th>
<th>Kurtosis estimations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative word of mouth a: warning others not to use DA</td>
<td>-4.81</td>
<td>-7.35</td>
</tr>
<tr>
<td>Negative word of mouth m: telling others not to use DA</td>
<td>-.033</td>
<td>-9.18</td>
</tr>
<tr>
<td>Negative word of mouth n: complaining to others</td>
<td>.029</td>
<td>-8.47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Complaining items</th>
<th>Skewness estimations</th>
<th>Kurtosis estimations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complain b: complaining to consumer agencies and authorities</td>
<td>6.10</td>
<td>-6.37</td>
</tr>
<tr>
<td>Complain h: complaining to the media</td>
<td>11.54</td>
<td>-1.57</td>
</tr>
<tr>
<td>Complain j: complaining to company employees or a manager</td>
<td>8.31</td>
<td>-5.02</td>
</tr>
<tr>
<td>Complain l: complaining on web sites</td>
<td>11.94</td>
<td>-1.49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Withdrawal of custom items</th>
<th>Skewness estimations</th>
<th>Kurtosis estimations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal of custom c: deciding not to use the service</td>
<td>-5.28</td>
<td>-7.06</td>
</tr>
<tr>
<td>Withdrawal of custom f: stop using allied company services</td>
<td>6.28</td>
<td>-6.11</td>
</tr>
<tr>
<td>Withdrawal of custom l: switching to a competitor</td>
<td>-3.68</td>
<td>-7.68</td>
</tr>
<tr>
<td>Withdrawal of custom k: convincing others not to fly</td>
<td>-.30</td>
<td>-8.56</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loyalty items</th>
<th>Skewness estimations</th>
<th>Kurtosis estimations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty d: conducting more business</td>
<td>12.48</td>
<td>3.28</td>
</tr>
<tr>
<td>Loyalty e: recommending the company</td>
<td>12.47</td>
<td>2.44</td>
</tr>
<tr>
<td>Loyalty g: considering the company as first choice</td>
<td>11.35</td>
<td>0.92</td>
</tr>
<tr>
<td>Loyalty o: encouraging others to use the company</td>
<td>13.96</td>
<td>4.06</td>
</tr>
</tbody>
</table>

Tests for linearity did not find strong relationships between emotions and behaviour.

7.6.7 Assumptions of Normality for Attitude

An examination of missing data for attitude showed that between 1.0–1.9% of items were missing, substantially below the area of concern. The boxplots showed no outliers and the box and whiskers extended the full breadth of the scale. The histograms showed a positive skew for most items, ranging from 3.12 to 7.20, with only attitude “c” (to service quality) within normal range. All items had a strong negative kurtosis ranging from -4.02 to -6.03, however no transformations were carried out. Examination of the normal probability plots (Q-Q plots) showed that most scores were normally distributed along the expected normal value line. Tests for linearity between the negative emotions and attitudes were carried out, showing strong heteroscedasticity but no relationships between the selected variables.
### Appendix 7.7 Factor Analysis – Exploratory

#### 7.7.1 EFA – 12 Factor Solution - Pattern Matrix

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>negative WOM m</td>
<td>.893</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>withdrawal of custom k</td>
<td>.811</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>negative WOM n</td>
<td>.683</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>negative WOM a</td>
<td>.589</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>withdrawal of custom c</td>
<td>.577</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>withdrawal of custom f</td>
<td>.526</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>withdrawal of custom i</td>
<td>.513</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitude d</td>
<td></td>
<td>.911</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitude b</td>
<td></td>
<td>.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitude c</td>
<td></td>
<td>.800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitude f</td>
<td></td>
<td>.782</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitude e</td>
<td></td>
<td>.732</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitude g</td>
<td></td>
<td>.726</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitude a</td>
<td></td>
<td>.601</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution - ext/controllable d</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.692</td>
</tr>
<tr>
<td>attribution - ext/controllable c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.645</td>
</tr>
<tr>
<td>attribution - internal/external g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.619</td>
</tr>
<tr>
<td>attribution - internal/external a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.507</td>
</tr>
<tr>
<td>attribution - internal/external f</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.385</td>
</tr>
<tr>
<td>involvement b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.893</td>
</tr>
<tr>
<td>involvement d</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.890</td>
</tr>
<tr>
<td>involvement a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.865</td>
</tr>
<tr>
<td>involvement c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.804</td>
</tr>
<tr>
<td>complain h</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.818</td>
<td></td>
</tr>
<tr>
<td>complain l</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.815</td>
<td></td>
<td></td>
</tr>
<tr>
<td>complain j</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.775</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>complain b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.611</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>scared - fear to service use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.880</td>
</tr>
<tr>
<td>uneasy - fear to service use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.876</td>
</tr>
<tr>
<td>fearful - fear to service use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.836</td>
</tr>
<tr>
<td>apprehensive - fear to service use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.774</td>
</tr>
<tr>
<td>worried - fear to service use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.756</td>
</tr>
<tr>
<td>distressed - fear to service use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.724</td>
</tr>
<tr>
<td>concerned - fear to company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.543</td>
</tr>
<tr>
<td>Sympathetic</td>
<td>Sympathy to company</td>
<td>-0.900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------</td>
<td>--------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sorry</td>
<td>Sympathy to company</td>
<td>-0.755</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compassion</td>
<td>Sympathy to company</td>
<td>-0.703</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>Sympathy to company</td>
<td>-0.620</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoyment</td>
<td>Joy to service use</td>
<td>0.785</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glad</td>
<td>Joy to service use</td>
<td>0.665</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contented</td>
<td>Joy to service use</td>
<td>0.631</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td>Joy to company</td>
<td>0.351</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attribution</td>
<td>Int/controllable e</td>
<td>0.784</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attribution</td>
<td>Int/controllable i</td>
<td>0.760</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attribution</td>
<td>Int/controllable b</td>
<td>0.652</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td></td>
<td>0.642</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibility a</td>
<td></td>
<td>0.544</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibility c</td>
<td></td>
<td>0.521</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contempt</td>
<td>Anger to company</td>
<td>-0.626</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disgusted</td>
<td>Anger to company</td>
<td>-0.578</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outraged</td>
<td>Anger to company</td>
<td>-0.481</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dislike</td>
<td>Anger to company</td>
<td>-0.468</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angry</td>
<td>Anger to company</td>
<td>-0.456</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annoyed</td>
<td>Anger to company</td>
<td>-0.410</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty e</td>
<td></td>
<td>0.738</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty d</td>
<td></td>
<td>0.637</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty o</td>
<td></td>
<td>0.504</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty g</td>
<td></td>
<td>0.471</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Astonished</td>
<td>Surprise to company</td>
<td>-0.874</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazed</td>
<td>Surprise to company</td>
<td>-0.836</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surprise</td>
<td>Surprise to company</td>
<td>-0.682</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shocked</td>
<td>Surprise to company</td>
<td>-0.653</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Astounded</td>
<td>Surprise to company</td>
<td>-0.604</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


a Rotation converged in 18 iterations.
### 7.7.2 EFA of Withdrawal of Custom and Word of Mouth Items

**Factor Matrix (a)**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>negative WOM m</td>
<td>.939</td>
</tr>
<tr>
<td>withdrawal of custom k</td>
<td>.907</td>
</tr>
<tr>
<td>negative WOM a</td>
<td>.886</td>
</tr>
<tr>
<td>withdrawal of custom c</td>
<td>.842</td>
</tr>
<tr>
<td>negative WOM n</td>
<td>.839</td>
</tr>
<tr>
<td>withdrawal of custom i</td>
<td>.827</td>
</tr>
<tr>
<td>withdrawal of custom f</td>
<td>.609</td>
</tr>
</tbody>
</table>

**Extraction Method:** Principal Axis Factoring.

- 1 factor extracted. 4 iterations required.
Appendix 7.8. CFA of Items and Scale Reliabilities

7.8.1. Involvement Construct Tested on Half-Sample

This 4-item scale was tested as a congeneric model. Chi-square difference tests suggested that the original model provided a poor fit, $\chi^2(2, N = 442) = 10.869 \ p < .001$, while other fit statistics were not within acceptable ranges. Loadings for all items on their designated factor were significant ($p < .001$). The standardized residual covariances showed no items nearing 2.58, which was considered large (Jöreskog & Sörbom, 1988, in Byrne, 2001). The modification indices indicated that the error terms e1 and e2 should be correlated to improve the fit. As the items both referred to degree of importance (is important to me/matters to me), this made conceptual sense. The second model with correlated error terms (see Appendix 7.8.1) provided a better fit, $\chi^2(1, N = 436) = 1.46, \ p > .05$ (CFI = 1, RMR = .007, GFI = .998, AGFI = .994, RMSEA = .032).

Weightings were determined for all items in the scale using the entire sample, with the factor loadings given in Appendix 7.8.2. These were used to weight the scale items in the summative measure. The scale tested on the entire sample had a Cronbach’s Alpha of .91, with all items necessary for this level of reliability.

![Diagram of the model](image)

a = important/unimportant  b = doesn’t matter/matters  
c = significant or not  d = of interest or not

<table>
<thead>
<tr>
<th></th>
<th>INVOL_1D</th>
<th>INVOL_1C</th>
<th>INVOL_1B</th>
<th>INVOL_1A</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>involvement</td>
<td>.305</td>
<td>.262</td>
<td>.262</td>
<td>.103</td>
<td>.932</td>
</tr>
<tr>
<td>(.932 ) weight</td>
<td>.327</td>
<td>.281</td>
<td>.281</td>
<td>.111</td>
<td>1.00</td>
</tr>
</tbody>
</table>
7.8.3 CFA of all Attribution Items (Except Accountability)

- Internal/controllable attribution b = crash result manageable by DA
- Internal/controllable attribution e = was preventable by DA
- Internal/controllable attribution i = DA had power over
- External/controllable attribution c = someone external to DA could control
- External/controllable attribution d = under the power of those outside DA
- Internal/external locus attribution f = reflected on an aspect of DA
- Internal/external locus attribution g = was to do with a situation outside DA
- Internal/external locus attribution a = resulted from something inside DA
- Responsibility a = DA was responsible for the crash cause
- Responsibility c = DA could have controlled the crash cause
7.8.4 Testing Discriminant Validity of 2-Factor Scale: Internal Controllability and Responsibility

The 2-factor model of internal controllability and responsibility had a good chi square and fit indices. Results showed a non-significant chi square $\chi^2(11, N = 427) = 1.78, p > .05$.

Internally controllable: $b =$ manageable, $e =$ preventable, $i =$ extent of power over
Responsibility: $a =$ believable, $c =$ made sense

![Diagram of the 2-factor model]
7.8.5 Testing Discriminant Validity of 1-Factor Scale – Internal Controllability and Responsibility Combined

The 1-factor model did not have a good chi square or fit indices. Results for the 1-factor congeneric model showed a significant chi-square $\chi^2$ (10, $N=427)=9.744, p<.05$ and poor fit indices.
7.8.6 Factor Score Weights for Locus Scale (Internal/External) Using Entire Sample

<table>
<thead>
<tr>
<th>ATTRIB 4A</th>
<th>ATTRIB 4G</th>
<th>ATTRIB 4F</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Something inside DA</td>
<td>Situation outside DA</td>
<td>Reflected on an aspect of DA</td>
<td></td>
</tr>
<tr>
<td>.232</td>
<td>.395</td>
<td>.201</td>
<td>= .828</td>
</tr>
<tr>
<td>/.828</td>
<td>= .280</td>
<td>= .477</td>
<td>= .243</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

7.8.7 Factor Score Weights for Internally Controllable Scale Using Whole Sample

<table>
<thead>
<tr>
<th>ATTRIB 4I</th>
<th>ATTRIB 4E</th>
<th>ATTRIB 4B</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA had power over</td>
<td>Was preventable</td>
<td>Was manageable</td>
<td></td>
</tr>
<tr>
<td>.278</td>
<td>.360</td>
<td>.213</td>
<td>.851</td>
</tr>
<tr>
<td>/.851</td>
<td>= .327</td>
<td>= .423</td>
<td>= .250</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

7.8.8 Factor Weights for Externally Controllable Scale Using Whole Sample

<table>
<thead>
<tr>
<th>ATTRIB 4D</th>
<th>ATTRIB 4C</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under power of those outside DA</td>
<td>Someone external to DA could control</td>
<td></td>
</tr>
<tr>
<td>.309</td>
<td>.373</td>
<td>.682</td>
</tr>
<tr>
<td>/.682</td>
<td>= .453</td>
<td>= .547</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

7.8.9 Factor Score Weights for Responsibility Using The Whole Sample


<table>
<thead>
<tr>
<th>Responsibility</th>
<th>RESP_8C DA responsible for crash</th>
<th>RESP_8A DA could have controlled crash</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility .79</td>
<td>.345</td>
<td>.445</td>
<td>.790</td>
</tr>
<tr>
<td></td>
<td>= .437</td>
<td>= .563</td>
<td>1.00</td>
</tr>
</tbody>
</table>
7.8.10 CFA of Anger Scale - Test on Half-Sample

When the model was run using all six anger items ("frustrated" had been removed in the EFA), the chi-square value was significant, showing poor model fit, $\chi^2 (9, N = 443) = 8.90, p < .01$ and other fit statistics were not within acceptable ranges. All factor loadings were significant at $p < .001$. The standardized residual covariances showed no items nearing 2.58. The modification indices indicated that error terms e6 and e7 should be correlated. The model was re-run, which resulted in some improvement, $\chi^2 (8, N = 443) = 4.258, p < .01$, although most fit statistics were poor. The modification indices suggested correlating error terms e1 and e2. This resulted in a still significant chi-square, $\chi^2 (7, N = 443) = 2.77, p < .01$, but reasonable fit statistics (CFI = .993, GFI = .985, AGFI = .956, RMSEA = .063, RMR = .059). The RMR may have indicated outliers in the data.

As this was a large scale, I deleted one item from each pair that had correlated error terms which deleted had the lowest factor loadings – ‘dislike’ and ‘contempt’ – leaving a more parsimonious 4-item scale consisting of ‘angry’, ‘disgusted’, ‘annoyed’ and ‘outraged’. (See Appendix 7.8.11 for the model and Appendix 7.8.12 for factor score weights for the whole sample).
7.8.11 CFA of Anger Scale Minus Contempt and Dislike – with Good Chi-Square

![Diagram of anger emotions and factor scores]

7.8.12 Factor Scores for Anger Using the Entire Sample

<table>
<thead>
<tr>
<th></th>
<th>ANG_9S</th>
<th>ANG_9L</th>
<th>ANG_9F</th>
<th>ANG_9A</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>outraged</td>
<td>.183</td>
<td>.106</td>
<td>.123</td>
<td>.112</td>
<td>.524</td>
</tr>
<tr>
<td>annoyed</td>
<td>.349</td>
<td>.202</td>
<td>.235</td>
<td>.214</td>
<td>1.00</td>
</tr>
</tbody>
</table>

<footnote>Factors scores for anger using the entire sample, with factor loadings shown for each emotion. The table includes factor score weights for four emotions: outraged, annoyed, disgusted, and angry. The total factor score for anger is .524, and for the entire sample, it is 1.00. The factor score weights sum to one. The diagram illustrates the factor loadings for each emotion on the anger factor. Anger correlations include: (.62) for angry, (.71) for disgusted, (.80) for annoyed, and (.84) for outraged.
</footnote>
The 7-item scale had a significant chi-square, $\chi^2(14, N = 449) = 19.765$, $p < .01$, indicating a poor fit. Other fit statistics were not within acceptable ranges. However, loadings for all items on their designated factor were significant ($p < .01$) and the standardized residual covariances showed no items nearing 2.58. However, the modification indices indicated there were likely to be multiple correlations between items. Starting with the highest modification index of 105.92, which indicated correlations between error terms e3 and e4, I re-ran the analysis. This resulted in an improvement in chi square, $\chi^2(13, N = 449) = 11.89$, $p < .01$, and slightly improved fit indices. The modification indices indicated additional correlations between error terms e1 and e2. Re-running the analysis, however, still resulted in a significant chi-square, $\chi^2(12, N = 449) = 7.06$, $p < .01$, and slightly improved fit indices, but the modification indices indicated additional correlations between error terms e2 and e3. This model resulted in slightly improved fit indices, $\chi^2(11, N = 449) = 6.76$, $p < .01$, but the modification indices indicated additional correlations between error terms e2 and e4. Another run resulted in slight improvements in fit indices, $\chi^2(10, N = 449) = 6.067$, $p < .01$, but indicated additional correlations between error terms e1 and e3. This resulted in a slight improvement in fit indices, $\chi^2(9, N = 449) = 5.613$, $p < .01$ but indicated correlations between error terms e1 and e4. This resulted in satisfactory fit indices: $\chi^2(8, N = 449) = 1.64$, $p > .05$ (CFI = .996, RMR = .030, GFI = .987, AGFI = .953, TLI = .990, RMSEA = .060).
The removal of concerned, worried and uneasy resulted in the most improved fit indices and a more user-friendly 4-item scale, consisting of apprehensive, scared, distressed and fearful. The final model is in Appendix 7.8.14. The factor loadings for each item, calculated using the entire sample, are shown in Appendix 7.8.15 and were used to weight the scale items in the summative measure.
7.8.14 Fear Scale with Good Chi Square after Removal of Correlated Items

7.8.15 Factor Scores for Fear Using the Entire Sample

<table>
<thead>
<tr>
<th></th>
<th>FEAR_10J</th>
<th>FEAR_10H</th>
<th>FEAR_10G</th>
<th>FEAR_10E</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>fear</td>
<td>.117</td>
<td>.084</td>
<td>.278</td>
<td>.057</td>
<td>.536</td>
</tr>
<tr>
<td>.536</td>
<td>= .218</td>
<td>= .157</td>
<td>= .519</td>
<td>= .106</td>
<td>1.00</td>
</tr>
</tbody>
</table>
7.8.16 Joy Scale with Four Items and Good Chi Square

The 4-item scale comprising “satisfied”, “enjoyment”, “contented” and “glad” was tested as a congeneric model. Model fit estimates resulted in a significant chi-square value, $\chi^2(3, N = 449) = 8.367, p < .001$, indicating a poor fit. Other fit statistics were not within acceptable ranges. However, loadings for all items on their designated factor were significant ($p < .001$) and the standardized residual covariances indicated no problem with any item. However, the modification indices indicated a correlation between error terms e1 and e4. The analysis was re-run, resulting in a good fit. As the fit indices could not be estimated on a 3-item scale, it was decided to accept this 4-item scale. Factor score weights (see Appendix 7.8.17), calculated using the entire sample, were used to weight scale items for the summative measure.

7.8.17 Factor Scores for Joy Using the Entire Sample

<table>
<thead>
<tr>
<th></th>
<th>JOY_10I</th>
<th>JOY_10D</th>
<th>JOY_10B</th>
<th>JOY_9O</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glad</td>
<td>.164</td>
<td>.237</td>
<td>.260</td>
<td>.041</td>
<td>.702</td>
</tr>
<tr>
<td>Contented</td>
<td>.234</td>
<td>.338</td>
<td>.370</td>
<td>.058</td>
<td>1.00</td>
</tr>
</tbody>
</table>

\[ \text{TOTAL} = .702 \]

\[ = .234 \]

\[ = .338 \]

\[ = .370 \]

\[ = .058 \]
7.8.18 Surprise Scale with Good Chi-Square

The surprise scale was tested as a congeneric model. Model fit estimates indicated a significant chi-square value, $\chi^2(5, N = 449) = 12.781, p < .01$, indicating a poor fit. Other fit statistics were not within acceptable ranges. The standardized residual covariances indicated a high value between items of “astounded” and “surprised” - above the 2.58 recommended cutoff. As the modification indices indicated a number of correlations between “surprised” and other items, and as “surprised” had the lowest factor score weight, this item was deleted. I re-ran the analysis to achieve a similar chi-square value, $\chi^2(2, N = 449) = 12.905, p < .01$, but improved fit indices.

The modification indices indicated correlations between error terms e2 and e3. Re-running the analysis resulted in a perfect fit with a just identified model, $\chi^2(1, N = 449) = .000, p > .05$ (CFI = 1.00, RMR = .000, GFI = 1, AGFI = 1.00, TLI = 1.00, RMSEA = .000) which was accepted. The resultant model is in Appendix 7.8.18. Using the final model and the entire sample, the factor loadings for each item were calculated (see Appendix 7.8.19) and used to weight the scale items in the summative measure.

![Diagram of factor analysis]

7.8.19 Factor Scores for Surprise Using the Entire Sample

<table>
<thead>
<tr>
<th></th>
<th>SUR_9Q</th>
<th>SUR_9P</th>
<th>SUR_9N</th>
<th>SUR_9G</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>surprise</td>
<td>.371</td>
<td>.093</td>
<td>.029</td>
<td>.030</td>
<td>.523</td>
</tr>
<tr>
<td>surprise</td>
<td>= .523</td>
<td>= .709</td>
<td>= .178</td>
<td>= .055</td>
<td>= .057</td>
</tr>
</tbody>
</table>

7.8.20 Sympathy Scale with Acceptable Chi-Square

The sympathy scale showed reasonable model fit estimates. However, RMSEA and RMR were non-significant (RMSEA = .064, RMR = .062), which may have indicated outliers in the data (although multivariate outliers were earlier removed using Mahalanobis distance). Loadings for all items on their designated factor were significant ($p < .001$) and the standardized residual covariances showed no items nearing 2.58. The factor score weights are in Appendix 7.8.21. The scale reliability was tested using the entire sample.

7.8.21 Factor Scores for Sympathy Using the Entire Sample

<table>
<thead>
<tr>
<th></th>
<th>SYM_9M</th>
<th>SYM_9K</th>
<th>SYM_9H</th>
<th>SYM_9C</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>sympathy</td>
<td>.096</td>
<td>.096</td>
<td>.191</td>
<td>.211</td>
<td>.594</td>
</tr>
<tr>
<td>1.594</td>
<td>= .161</td>
<td>= .161</td>
<td>= .322</td>
<td>= .355</td>
<td>1</td>
</tr>
</tbody>
</table>
7.8.22 Loyalty Scale with Acceptable Fit Indices

The RMR may have indicated outliers in the data, although these were not obvious in earlier calculations. Loadings for all items on their designated factor were significant \((p < .001)\) and the standardized residual covariances showed no items nearing 2.58. While the modification indices indicated that correlating error terms \(e_1\) and \(e_4\) would very marginally improve the fit, it was decided not to improve this analysis further. Factor score weights, estimated using the entire sample, are in Appendix 7.8.23.

![Loyalty Scale Diagram]

7.8.23 Factor Scores for Loyalty Using the Entire Sample

<table>
<thead>
<tr>
<th>LOYL_11O</th>
<th>LOYL_11G</th>
<th>LOYL_11E</th>
<th>LOYL_11D</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>loyalty</td>
<td>.140</td>
<td>.151</td>
<td>.295</td>
<td>.165</td>
</tr>
<tr>
<td>loyalty</td>
<td>.74</td>
<td>.72</td>
<td>.75</td>
<td>.72</td>
</tr>
<tr>
<td>loyalty</td>
<td>.85</td>
<td>.56</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>loyalty</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>loyalty</td>
<td></td>
<td>.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>loyalty</td>
<td></td>
<td></td>
<td>.54</td>
<td></td>
</tr>
</tbody>
</table>

\(\sum = .186\quad = .201\quad = .393\quad = .220\quad = 1.00\)
7.8.24 Correlation between WOM And WOC

WOC consisted of four items and -WOM of three items. An initial CFA showed an estimated correlation between -WOM and WOC of .998, which appeared on the path diagram as 1.00, indicating that these items should be amalgamated into a WOC-WOM scale. This scale will now be referred to as “disloyalty”, as it includes advising friends and relatives to avoid the service, negative purchase intent, switching to another company, and boycotting other company services.

However, keeping in mind Yavus and Babakus’ (1995) suggestion that if the single-factor model, where the two sets of measures are forced to load on one factor, provides a significantly larger chi-square than the 2-factor formulation, the results are considered as evidence of discriminant validity (Yavus & Babakus, 1995). However, the 2-factor model had slightly worse chi-square and fit indices, $\chi^2(14, N = 444) = 15.102, p < .001$. As a result, the amalgamated scale was used.
7.8.25 WOC-WOM Scale with Good Fit Indices

The 7-item disloyalty scale was tested as a congeneric model. The initial CFA indicated poor fit, as expected with a large scale. A number of re-runs of the model resulted in multiple correlated error terms (see details and model in Appendix 7.8.25), indicating redundant items.
7.8.26 Disloyalty Scale with Excellent Fit Indices

Three items with the lowest factor loadings were removed before the chi-square was non-significant leaving three -WOM items and one WOC item. This 4-item scale had excellent fit indices. The factor loadings for each item, calculated using the entire sample, are in Appendix 7.8.27 and were used to weight the scale items for the summative measure. The reliability of the scale was tested on the entire sample.

-WOM a = warn others to avoid the service
-WOM m = tell friends and relatives not to use the service
-WOM n = complain to friends and relatives
WOC k = convince friends and relatives not to fly

7.8.27 Factor score weights for disloyalty scale using the entire sample

<table>
<thead>
<tr>
<th></th>
<th>WOC_11K</th>
<th>WOM_11N</th>
<th>WOM_11M</th>
<th>WOM_11A</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOC_-WOM</td>
<td>.103</td>
<td>.052</td>
<td>.266</td>
<td>.042</td>
<td>.463</td>
</tr>
<tr>
<td>/ .463</td>
<td>.222</td>
<td>.112</td>
<td>.575</td>
<td>.091</td>
<td>1.00</td>
</tr>
</tbody>
</table>
7.8.28 CFA of Complain Scale

Cronbach’s alpha for the complain scale, analyzed using the whole sample, was .89, with all items necessary.

7.8.29 Factor Scores for Complain Using the Entire Sample

<table>
<thead>
<tr>
<th></th>
<th>COMP_11L</th>
<th>COMP_11J</th>
<th>COMP_11H</th>
<th>COM_11B</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>complain</td>
<td>.177</td>
<td>.133</td>
<td>.153</td>
<td>.098</td>
<td>.561</td>
</tr>
<tr>
<td></td>
<td>= .316</td>
<td>= .237</td>
<td>= .273</td>
<td>= .175</td>
<td>= 1.00</td>
</tr>
</tbody>
</table>
7.8.30 CFA of Attitude Scale Using the Whole Sample

The 7-item scale was tested as a congeneric model and the initial CFA indicated poor fit, with a significant chi-square value, $\chi^2(14, N = 442) = 13.226, p < .001$. Other fit statistics were not within acceptable ranges. However, loadings for all items on their designated factor were significant ($p < .001$) and the standardized residual covariances indicated no problem with any item. The modification indices indicated multiple correlations. Starting with the highest modification index of 62.669, which indicated correlations between error terms $e_6$ and $e_7$, I re-ran the analysis. This resulted in an improved result, $\chi^2(13, N = 442) = 8.613, p < .001$ and slightly improved it indices. The modification indices indicated additional correlations between error terms $e_2$ and $e_3$. Re-running the analysis resulted in, $\chi^2(12, N = 442) = 7.443, p < .001$, slightly improved fit indices and indicated additional correlations between error terms $e_3$ and $e_4$. A re-run resulted in slightly improved results, $\chi^2(11, N = 442) = 6.775, p < .001$ and indicated that additional correlations between error terms $e_2$ and $e_4$. A re-run resulted in slight improvements, $\chi^2(10, N = 442) = 5.848, p < .001$, but indicated additional correlations between error terms $e_1$ and $e_2$. This resulted in a slight improvement in fit indices, $\chi^2(9, N = 442) = 4.363, p < .001$, but indicated correlations between error terms $e_1$ and $e_3$. This yielded reasonable fit indices but still a significant $p$ value, $\chi^2(8, N = 442) = 2.600, p = .008$ (CFI = .996, GFI = .987, AGFI = .954, TLI = .991, RMR = .025, RMSEA = .06).
Items a, b, c and g had the lowest factor loadings. As deleting item ‘a’ resulted in poorer results (i.e., a higher chi-square) ‘g’ was instead deleted.

Attitude a = Professional ability
Attitude b = Reputation
Attitude c = Quality of service
Attitude d = Overall general impression
Attitude e = Trustworthiness
Attitude f = Likeability
Attitude g = Customer orientation

<table>
<thead>
<tr>
<th></th>
<th>ATT_12F</th>
<th>ATT_12E</th>
<th>ATT_12D</th>
<th>ATT_12A</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>attitude</td>
<td>.208</td>
<td>.190</td>
<td>.136</td>
<td>.082</td>
<td>.622</td>
</tr>
<tr>
<td></td>
<td>.616</td>
<td>.338</td>
<td>.308</td>
<td>.221</td>
<td>1.000</td>
</tr>
</tbody>
</table>
7.9.1 Results for Testing Impact of Crisis Type on 2-Item Manipulation Check

The locus Crisis type (internal/external) scores were compared with the manipulation check for internal/external. There was a significant difference in mean scores for internal and external Crisis types. The effect size, hand calculated using eta squared = 0.151, indicating a large effect size. See Table 81.

The controllability Crisis type (controllable, uncontrollable) was compared with the manipulation check for controllability. There was a significant difference in mean scores for controllable and uncontrollable Crisis types. The calculated effect size was moderate (eta squared = 0.097). See Table 81. For boxplots of the manipulation checks see Appendix 7.9.1.

The internal crisis was perceived as more internal than was the external crisis, while the controllable crisis was viewed as more controllable than was the uncontrollable crisis.

<table>
<thead>
<tr>
<th>Check type</th>
<th>IV</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>$\eta^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable - locus</td>
<td>- internal</td>
<td>2.53</td>
<td>1.68</td>
<td>871</td>
<td>12.48</td>
<td>.15</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>- external</td>
<td>3.99</td>
<td>1.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent variable – controllability</td>
<td>- controllable</td>
<td>2.84</td>
<td>1.76</td>
<td>881</td>
<td>9.87</td>
<td>.10</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>- uncontrollable</td>
<td>3.99</td>
<td>1.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.9.2 Box Plots for the Manipulation Check for Locus Crisis Type and Controllable Crisis Type

Highly external

Highly internal

Highly controllable

Highly uncontrollable
7.10.1 Results and Means Plot for the Manipulation Check for No Comment

For the Account of “no comment”, there was a statistically significant difference in mean scores between “no comment” and all other Accounts, $F(4, 863) = 8.26, p < .001, \eta^2 = .02$, although the effect size calculated was small. Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “no comment” was significantly different from those for “denial”, “excuse”, “justification” and “confession”. This meant that “no comment” was perceived as intended. See means plot.
7.10.2 Results and Means Plot for the Manipulation Check for Denial

For the Account of “denial”, there was a statistically significant difference in mean scores between “denial” and all other Accounts, $F(4, 868) = 108.54, p < .001, \eta^2 = .33$. Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “denial” was significantly different from those for “no comment”, “excuse”, “justification”, and “confession”. Thus “denial” was perceived as intended. Refer to means plot for “denial”. 
7.10.3 Results and Means Plot for the Manipulation Check for Excuse

For the Account of “excuse”, there was a statistically significant difference between “excuse” and “no comment”, and “confession”, but not in respect of “denial” and “justification”, $F(4, 873) = 78.65, p < .001, \eta^2 = .26$. The effect size was very large. Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “excuse” was significantly different from “no comment” and “confession”, but not “denial” and “justification”. Refer to means plot of “excuse”.

![Means Plot for Excuse](image-url)
For the Account of “justification”, there was a statistically significant difference in scores between “justification” and all other Accounts, $F(4, 868) = 185.39, p < .001, \eta^2 = .46$. Post-hoc comparisons using Tukey’s HSD test indicated that the mean score for “justification” was significantly different from those for “no comment”, “denial”, “excuse” and “confession”. Thus “justification” was perceived as intended. See means plot.
7.10.5 Results and Means Plot for the Manipulation Check for Confession

For the Account of “confession”, there was a statistically significant difference in scores between “confession” and all other Accounts, \( F(4, 872) = 463.98, p < .001, \eta^2 = .68 \). Post-hoc comparisons using Tukey’s HSD indicated that the mean score for “confession” was significantly different from those for “no comment”, “denial”, “excuse” and “justification”. “Confession” was perceived as intended. See means plot.

Appendix 7.11 Further Details on the 1-item Account Manipulation Check

A check of the cross-tabulations indicated that, of the 173 participants who received the No Comment treatment, 87.3% (151/173) identified the response as No Comment; of the 170 who received the Denial treatment, only 41.8% (71/170) identified it as Denial while 54.1% (92/170) erroneously identified it as Excuse (which may also reflect an ordering effect as Excuse was the first Account item); of those who received the Excuse treatment, 79.7% (141/177) identified the Account as Excuse; 65.1% (112/172) identified Justification correctly; 85.7% (156/182) identified Confession correctly. There were some possible ordering effects as the first response (Excuse) received 33.5% of all responses as opposed to an expected 16.1%. This effect did not apply to the second Account, which was Confession.
Appendix 7.12 Means Plot Showing Credibility of Accounts
Appendix 7.13 Box Plot Showing the IV of Harm Tested against Perceived Injury Levels
Appendix 7.14 Means Plots Indicating Impact of Account on Dependent Variables

7.14.1 Means Plot Showing Impact of Account on Anger

![Graph showing mean anger by account type]

7.14.2 Means Plot Showing Impact of Account on Sympathy

![Graph showing mean sympathy by account type]
7.14.3 Means Plot Showing Impact of Account on Disloyalty

- Account type: Confession, Justification, Excuse, Denial, No comment
- Mean of Disloyalty:
  - Confession: 4.4
  - Justification: 4.2
  - Excuse: 4.0
  - Denial: 3.8
  - No comment: 3.6

7.14.4 Means Plot Showing Impact of Account on Loyalty

- Account type: Confession, Justification, Excuse, Denial, No comment
- Mean of Loyalty:
  - Confession: 2.6
  - Justification: 2.5
  - Excuse: 2.4
  - Denial: 2.3
  - No comment: 2.2

7.14.5 Means Plot Showing Impact of Account on Attitude

7.14.5 Means Plot Showing Impact of Account on Responsibility
Appendix 7.15 Demographic Variables

7.15.1 Bar Chart for Age

7.15.2 Bar Chart for Education
Appendix 7.16 Non-significant Results for Demographic MANOVA

- Education $F(16, 872) = .844, p = .33$, Pillai’s trace = .032.
- Age and education $F(64, 3536) = 1.039, p = .39$, Pillai’s trace = .148
- Age and income $F(160, 3536) = 1.063, p = .28$, Pillai’s trace = .367
- Education and income $F(80, 3536) = 1.080, p = .30$, Pillai’s trace = .191
- Age and gender $F(32, 1752) = 1.042, p = .40$, Pillai’s trace = .075,
- Education and gender $F(16, 872) = .770, p = .72$, Pillai’s trace = .028,
- Age, education and gender $F(64, 3536) = 1.095, p = .28$, Pillai’s trace = .155,
- Income and gender $F(40, 2195) = .866, p = .71$, Pillai’s trace = .078,
- Age, income and gender $F(152, 3536) = 1.000, p = .49$, Pillai’s trace = .330,
- Education, income and gender $F(80, 3536) = .937, p = .64$, Pillai’s trace = .166,
Appendix 7.16 Demographic Variables

7.16.1 Means Plot Showing the Impact of Age on Anger

7.16.2 Means Plot Showing the Impact of Age on Fear
7.16.3 Means Plot Showing the Impact of Age on Joy

7.16.4 Means Plot Showing the Impact of Age on Sympathy
7.16.5 Means Plot Showing the Impact of Age on Loyalty

7.16.6 Means Plot Showing the Impact of Age on Disloyalty
Appendix 17.7 Interaction effects for Account and Credibility

17.7.1 Account and Credibility Impact Accountability

Estimated Marginal Means of Accountability

17.7.2 Account and Credibility Impact Responsibility

Estimated Marginal Means of Responsibility
17.7.3 Account and Credibility Impact Anger

Estimated Marginal Means of Anger

![Graph showing estimated marginal means of anger for different account types and credibility levels.]

17.7.4 Account and Credibility Impact Joy

Estimated Marginal Means of Joy

![Graph showing estimated marginal means of joy for different account types and credibility levels.]

17.7.5 Account and Credibility Impact Loyalty

Estimated Marginal Means of Loyalty

High credibility

Low credibility

17.7.6 Account and Credibility Impact Disloyalty

Estimated Marginal Means of Disloyalty

Low Credibility

High credibility
17.7.7 Account and Credibility Impact Complaining

Estimated Marginal Means of Complain

Estimated Marginal Means

credibility grouped into high lo
lowest quartile
highest quartile

High credibility

Account type

No comment Denial Excuse Justification Confession


A dynasty waits for the dust to settle (2004, October 2). Retrieved 20.11.04, from The Age on anzwers.com.au


Calder, B. J. (1977). Focus groups and the nature of qualitative marketing research. 

*Journal of Marketing Research, 14*, 353-364.


Jac Nasser’s biggest test: Crisis-managing millions of potentially faulty tires will show how effective he’s been at transforming Ford and define his tenure as CEO. One tip: Lose the clunky TV ads. (2000, September 18). *Fortune*, p. 123.


helping and coping, responsibility attributions, and wellbeing in community 

Kasperson, R. E., Renn, O., Slovic, P., Brown, H. S., Emel, J., Goble, R., Kasperson, J. 


ofenses. *Psychological Reports, 80*, 1159-1165.

A qualitative study of mothers attending an urban women, infants, and children 

organizational research. In M. J. Martiniko (Ed.), *Attribution theory: An 
organizational perspective* (pp.17-34). Florida: St Lucie Press.

Aired on The Cutting Edge, SBS TV, Australia 6.3.01.

Publications.

Kitzinger, J., & Barbour, R. S. (1999). Introduction: The challenge and promise of 
focus groups. In R. S. Barbour., & J. Kitzinger (Eds.), *Developing focus group 


variance and specification error: A practical approach to detection. *The Journal 
of Psychology, 134*, 401-421.

Age*, p.1.

reliability and preliminary validity for an S-R inventory of anger: The subjective 
anger scale (SAS). *Personality, Individual Differences, 6*, 331-339.


