Suicide in Australian Children: An Examination of Characteristics and Impact on Parents

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Abstract

While rare, suicide in children younger than 15 years is a leading cause of death globally. Childhood is presumed to be a time of happiness, with children often assumed incapable of suicide. Yet, most children understand the lethality and finality of suicidal acts by age eight. The significance of the current research lies in its focus on children. Literature has tended to focus on individuals aged 15+ years, and studies which do include children have predominately grouped children and adolescents together for analysis and discussion. No comprehensive studies on suicide in Australian children have been conducted so it is unknown what suicide risk factors are relevant.

Suicide does not end with the suicidal act itself and individuals bereaved by suicide often experience a range of additional deleterious ramifications like guilt, blame, responsibility, rejection, and anger, intermingled with social responses such as social stigma and isolation. Few studies have examined the impact of a child suicide on bereaved parents, particularly the guilt, stigma, and responsibility associated with this type of death.

Derived from an Australian Research Council (ARC) Linkage Project (LP0990918), the overall aim of this research program was to obtain a better understanding of the predictive factors between suicidal and non-suicidal children under the age of 15 years. An additional aim focused on the impact of the child’s suicide on parents and explores the differences and similarities in the grief experiences of parents bereaved by suicide compared to parents whose child died due to other external causes of death. In order to achieve this, the current research program involved three different, though complementary components, using both aggregate and individual-level data, employing both quantitative and qualitative methodology.
Component One involved a Queensland population-based study using data derived from the Child Death Register (CDR). Using other external causes of deaths (OEC) a case-control study design was applied; cases were suicides of children (10-14 years) and adolescents (15-17 years); controls were OEC in the same age bands. During the period 2004-2012, suicide was the second leading cause of death in children, with hanging the predominate method. Remoteness of location, Indigenous ethnicity, being know to child protection system, familial conflict, disorders usually diagnosed during Infancy, Childhood, and Adolescence (e.g., ADHD), and previous suicidality were risk factors in child suicide. The incidence of suicide was found to increase with age and gender asymmetry was less evident among child suicides. In addition, alcohol consumption and prescription medication were significantly less commonly found.

Component Two involved a Queensland population-based study using data derived from the Queensland Suicide Register (QSR). Indigenous children had a suicide rate of 10.15 suicides per 100,000; 12.63-times higher than the suicide rate for other Australian children (0.80 per 100,000). Significant risk factors included: remoteness; living outside the parental home at time of death; and alcohol consumption prior to suicide. Psychiatric disorders were significantly less common and Indigenous children were significantly more likely to suicide outside the home.

Component Three applied a Psychological Autopsy (PA) approach. The information derived from12 interviews conducted with the biological parents, whose child died by suicide or OEC before their 16th birthday, was utilised in two ways. First, the findings were used to contextualise the quantitative components at a more idiographic level. While parents of children who died by suicide reported more behavioural, social, and emotional problems, when these issues were considered in the developmental and environmental context of the
child’s life, in consultation with a panel of psychiatrists, the prevalence of psychiatric disorders was small. Prior to their death, children who died by suicide had: increased interest and/or preoccupation with death; communicated suicidal intent; and, experienced adverse life events, familial conflict, and school-related problems. Second, Component Three explored the grief experience of parents. Some key differences of the grief experiences of parents bereaved by suicide and OEC emerged. Specifically, parents bereaved by suicide experience feelings of stigma and internalised responsibility framed within complex feelings of guilt and rejection.

The findings of this thesis contributes to the understanding of the suicidal process in children younger than 15 years old by highlighting the importance of separating children and adolescents through delineating similarities and differences between them. Evidence-based identification of key factors in child suicide is essential for effective and specifically-targeted suicide prevention. Findings highlight the multifaceted nature of suicide and demonstrate the importance of considering socio-environmental elements in the prevention of child suicide.

**Keywords:** child, adolescent, suicide, other external causes of death Aboriginal and Torres Strait Islander Australian, psychological autopsy, grief
Statement of Original Authorship

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.
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<th>Meaning</th>
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<tbody>
<tr>
<td>AISRAP</td>
<td>Australian Institute for Suicide Research and Prevention</td>
</tr>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>ARIA+</td>
<td>Accessibility Remoteness Indexes for Areas Plus</td>
</tr>
<tr>
<td>ARC</td>
<td>Australian Research Council</td>
</tr>
<tr>
<td>Autopsy</td>
<td>A thorough post-mortem examination of a body. Types of autopsies include external only, external/internal or external/partial internal.</td>
</tr>
<tr>
<td>BRD</td>
<td>Beyond Reasonable Doubt</td>
</tr>
<tr>
<td>CBCL</td>
<td>Child Behaviour Checklist</td>
</tr>
<tr>
<td>CCYPCG(^1)</td>
<td>Commission for Children and Young People and Child Guardian</td>
</tr>
<tr>
<td>CDR</td>
<td>Child Death Register</td>
</tr>
<tr>
<td>Child</td>
<td>An individual aged 15 years or younger</td>
</tr>
<tr>
<td>COD</td>
<td>Cause of Death</td>
</tr>
<tr>
<td>DSH</td>
<td>Deliberate self-harm</td>
</tr>
<tr>
<td>External Cause of Death</td>
<td>A death due to one of a group of environmental or circumstantial causes external to the body</td>
</tr>
<tr>
<td>Form 1</td>
<td>A form completed by the Queensland Police Service at time of death in accordance with the <em>Coroners Act 2003</em></td>
</tr>
<tr>
<td>GEQ</td>
<td>Grief Experience Questionnaire</td>
</tr>
<tr>
<td>ICD-10</td>
<td>International Classification of Disease, Tenth Revision</td>
</tr>
<tr>
<td>Indigenous</td>
<td>An individual who identifies as an Aboriginal and/or Torres Strait Islander</td>
</tr>
</tbody>
</table>

\(^1\) The Commission for Children and Young People and Child Guardian (CCYPCG) ceased operation on 30 June 2014.
<table>
<thead>
<tr>
<th>Abbreviation/Acronym</th>
<th>Meaning</th>
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</thead>
<tbody>
<tr>
<td>LGA</td>
<td>Local Government Area</td>
</tr>
<tr>
<td>MINI-KID-PL</td>
<td>Mini International Neuropsychiatric Interview for Children and Adolescents – Parent Version</td>
</tr>
<tr>
<td>NCIS</td>
<td>National Coronial Information System</td>
</tr>
<tr>
<td>OEC</td>
<td>Other external causes of death as categorised under Chapter XX of the International Classification of Disease, Tenth Revision</td>
</tr>
<tr>
<td>OSC</td>
<td>Office of State Coroner</td>
</tr>
<tr>
<td>PA</td>
<td>Psychological Autopsy</td>
</tr>
<tr>
<td>QMHC</td>
<td>Queensland Mental Health Commission</td>
</tr>
<tr>
<td>QAS</td>
<td>Queensland Ambulance Service</td>
</tr>
<tr>
<td>QPS</td>
<td>Queensland Police Service</td>
</tr>
<tr>
<td>QSR</td>
<td>Queensland Suicide Register</td>
</tr>
<tr>
<td>SLES</td>
<td>Stressful Life Events Schedule</td>
</tr>
<tr>
<td>SEIFA</td>
<td>Socio-Economic Indexes for Areas</td>
</tr>
<tr>
<td>Undetermined cause of death</td>
<td>There is insufficient information available in order to classify the death into one specific cause of death</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Acknowledgements

To the mothers and fathers who took the time to speak with me, I am both humbled and grateful that you shared your stories with me. Thank you for introducing me to your precious loved ones. Your words will stay with me always. First and foremost this thesis is for them.

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A special thanks to my big brother Dave, I am not sure I can really express how grateful I am for all of your help and support throughout my entire education. You are the very best big brother a little sister could possibly ask for.
To my Apirana family, may I take advantage of the opportunity to put in writing my thanks: for your love, your warmth, and your welcoming arms.

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For my baby sister Katie.
Publications and Research Outputs

To date, several research outputs have been drawn from this program of research; specifically, three peer-reviewed articles, one national and three state level conference presentations. All conference presentations were presented by the PhD Candidate unless otherwise stated. In chronological order, these are:


Soole R, Kõlves, K, De Leo, D. “Suicide in childhood and adolescence: Similarities and differences” (presentation, Gold Coast Health and Medical Research Conference, Gold Coast, Australia, November 29-30, 2012).


2 Kindly presented by Dr Kairi Kõlves in PhD Candidate’s absence.

Chapter 1

Introduction

Suicide across the life span is widely acknowledged to be a pervasive social, medical, and public health problem in society (Antai-Otong, 2003; Bertolote & Fleischmann, 2005; Sarkar, et al., 2010). According to the World Health Organization (WHO), over 800,000 people die by suicide each year; constituting 1.4% of all deaths (WHO, 2015). Global projections of suicide rates anticipate that self-inflicted deaths will rise to 1.53 million people by 2030 (Bertolote & Fleischmann, 2005).

Traditionally, social narratives associate childhood with joy, and so child death by suicide presents a confronting paradox to this assumption (Orbach, 1988). Although deemed to be an infrequent occurrence, suicide among children younger than 15 years is disproportionate in relation to all deaths in this age group. Indeed, suicide is a leading cause of death for this age group globally (Apter, Bursztein, Bertolote, Fleischmann, & Wasserman, 2009; Koplin & Agathen, 2002; Pelkonen & Marttunen, 2003; Dervic, et al., 2006; Vajani, Annest, Crosby, Alexander, & Mille, 2007), and several countries have observed rising rates in child (5-14 years) suicide since the 1960s (De Leo & Evans, 2003; Moens, Haenen, & van de Voorde, 1988).

Available statistics are likely an underestimation (De Leo, 2010; O’Donnell & Farmer, 1995). Empirical research suggests that this may be due to social stigma (De Leo, 2010), coronial reluctance to determine a verdict of suicide in children (Crepeau-Hobson, 2010), the potential for suicide methods to be mistaken as accidents in cases involving children (Grøholt & Ekeberg, 2003; Shaffer, 1974), and differing classification systems of states and countries (De Leo, 2010).
Children have previously been regarded as being precluded from participating in suicidal behaviour due to cognitive immaturity and subsequent understanding of death (Pfeffer, 1997). Children’s understanding of death gradually changes over time and individual factors, such as personal experience can potentially accelerate some children’s understanding more rapidly than others (Kane, 1979; Speece & Brent, 1984). A growing body of research suggests that children have an understanding of both death and the concept of suicide by age eight years (Mishara, 1999). Furthermore, it has been argued that the intent to cause self-harm or death is most important, regardless of the child’s cognitive understanding of the lethality or finality of their actions (Pfeffer, 1997; Tishler, Reiss, & Rhodes, 2007).

1.1 Research Rationale

Few studies have specifically focused on children younger than 15 years of age and, as yet, there have been no comprehensive studies on child suicide in Queensland (Soole, Kõlves, & De Leo, 2014a). Existing research has tended to focus on individuals aged 15 years and older; while studies which do include children have predominately grouped children and adolescents together for analysis and discussion (Pompili, Mancinelli, Girardi, Ruberto, & Tatareli, 2005). The consequence of such empirical investigation is that much of the knowledge existing for child suicide and subsequent policy stems from findings derived from an arguably distinct age group.

Children and adolescents warrant separate consideration as they differ in terms of physical, sexual, cognitive, and social development (Grøholt, Ekeberg, Wichstrøm, & Haldorsen, 1998; Sarkar et al., 2010). Failure to differentiate between these two life stages can have important scientific and clinical implications, which hinder the understanding of child suicide and the development of targeted suicide prevention practices. Suicide is a
complex and multifaceted behaviour and, since observations have not yet been derived from this specific group, it is currently unknown whether existing knowledge about suicide risk factors for adolescents and adults is relevant to children. Furthermore, little is known about the specific pathways to suicide for children, the ways in which the developmental process influences suicide, and the issues needed to be addressed in future suicide prevention programs.

Suicide within Indigenous populations is habitually greater than non-Indigenous populations (De Leo, Sveticic, Milner, & McKay, 2011). In Australia and New Zealand, Indigenous ethnicity has been identified as a significant predictor of suicide in children (Beautris, 2001a; Commission for Children and Young People and Child Guardian [CCYPCG], 2014). A recent report on Aboriginal and Torres Strait Islander people in Queensland reported that Indigenous children aged 5-14 years were at an almost 10-times greater risk of suicide, compared to other Australian children living in Queensland (De Leo, Sveticic, & Milner, 2011). The effects of colonisation and subsequent inter-generational trauma have been implicated in the overrepresentation of Indigenous people in suicide statistics (Tatz, 2005). Issues around the public health and mental and emotional wellbeing of Aboriginal and Torres Strait Islander people are becoming increasingly recognised in Australia (De Leo et al., 2011). To the author’s knowledge, at the time this research was conducted, there were no existing investigations into the factors associated with suicide in Australian Indigenous children younger than 15 years.

Suicide does not end with the suicidal act itself – the effect extends to those left behind. Bereavement from suicide may share many quantitative commonalities with other forms of bereavement (Cleiren, Diekstra, Kerkhof, & van der Wal, 1994; Murphy, Johnson, Wu, Fan, & Lohan, 2003; Séguin, Lesage, & Kiely, 1995), but may differ in a qualitative
sense (Clark & Goldney, 1995; Jordan, 2001). In this way, individuals bereaved by suicide often experience a range of different emotions like guilt, blame, responsibility, rejection, depressive feelings, and anger intermingled with social responses such as social stigma and isolation, which may differ from other bereaved populations (Cvinar, 2005; Jordan, 2001; McMenany, Jordan, & Mitchell, 2008). Studies on public perception support the contention that stigma and social isolation is more likely for suicide bereaved compared to other forms of bereavement. This implies that parents of children who die by suicide can experience additional, psychologically harmful ramifications from real, or otherwise perceived, diminishment of social support and increased negative community reactions (Calhoun, Selby, & Faulstich, 1980; Cerel, Jordan, & Duberstein, 2008; Jordan, 2001; Knieper, 1999; Provini, Everett, & Pfeffer, 2000; Seguin et al., 1995).

The loss of a child has been suggested to be a particularly traumatic experience (Maple, 2005; Stroebe, Stroebe, & Hannson, 1993; Wheeler, 1994). Kinship type, specifically the parent-child relationship, has been suggested as the most influential factor on almost all examined bereavement outcomes for suicide deaths, compared to other causes of death (Schneider, Grebner, Schnabel, & Georgi, 2011; Stroebe, Schut, & Stroebe, 2007). While some studies have investigated the grief experience following the suicides of adult children, few studies have examined the impact of a child suicide on parents, particularly the guilt, stigma and grief associated with the death.

1.2 Aim of Dissertation

Overall, this study aims to advance current understanding of suicide occurring during childhood by elucidating the specific pathways to child suicide and the demographic, psychiatric and psychosocial factors associated with child suicide. In addition, the study aims to explore grief experience of parents’ whose children have suicided compared to those
whose children died of other causes of death (OEC). The specific aims are presented below and a rationale for their inclusion will be outlined in Section 3.8.1.

*Aim 1* – Assess the demographic factors associated with child (10-14 years) and adolescent suicide (15-17 years), compared to children and adolescents who have died by other external causes of death in Queensland.

*Aim 2* – Compare the demographic, psychosocial, and psychiatric factors between child suicide (10-14 years) and adolescent suicide (15-19 years) in Queensland.

*Aim 3* – Compare current suicide rates of Aboriginal and Torres Islander and other Australian children (aged 10-14 years) in Queensland.

*Aim 4* – Compare the demographic, psychosocial, and psychiatric factors between Aboriginal and Torres Strait Islander child suicide and other Australian child suicide in Queensland.

*Aim 5* – Assess, on an idiographic level, the demographic, psychosocial, and psychiatric factors associated with child suicides (10-15 years) in Queensland as compared to a comparison group of children (10-15 years) who have died by other external causes of death in the same timeframe. Construct pathways to suicide in children using life charts in order to analyse similarities and differences in suicidal processes.

*Aim 6* – Explore the grief experience of parents bereaved by child suicide compared to parents bereaved by other external causes of death.
1.3 Theoretical Framework

Bronfenbrenner’s (1977) classic ecological theory was used as the guiding theoretical framework for thesis. Ultimately, suicide is an individual act; however, the suicidal process, and indeed the act, occurs in the context of the child’s interpersonal relationships, community, society, and culture (De Leo, 2002). Furthermore, suicide does not end with the suicidal act itself – the effect extends to those left behind. The ecological model offers a useful framework for understanding child suicide by integrating the individual, environmental, and social system factors that may be associated with suicide. The model comprises of the following hierarchically organised levels: organism, microsystems, exosystems, and macrosystems (Bronfenbrenner, 1994). The links and interactions within the various microsystems are referred to as mesosystems. This program of research will be predominately focused on the microsystem level. A full description and explanation of the theoretical framework is provided in Section 3.7.

1.4 Methodological Framework

This program of research involved three components using aggregate and individual level data. A case-control design was applied in the first component using data derived from the Child Death Register (CDR). The second component involved a retrospective case series analysis using data derived from the Queensland Suicide Register (QSR). The Psychological Autopsy (PA) method of investigation was applied in the third component. These three components will be discussed in more detail in Chapter Four.

1.5 Contribution of Dissertation

The significance of the current thesis lies in its focus on children in and of themselves. Suicide specifically among children has been largely neglected in prior research. Suicide
rates and risk factors vary across the lifespan (Beautrais, 2003a), and previous studies have typically grouped children and adolescents together (Soole et al., 2014a). In order to better inform and develop evidence-based prevention strategies targeted specifically to children, the identification of risk and protective factors is required. The current program of research aims to address this knowledge gap by exploring the factors associated with suicide in children at both aggregate and individual levels, and provide new knowledge about child suicide. In addition, the current program of research will utilise different sources of information, including the QSR and CDR, to supplement the PA data. This will allow comprehensive contextual information for each case to be obtained and will assist in the construction of life charts. Furthermore, the use of external causes of death as a comparison group, will allow the exploration of predictive factors associated with child suicide (Berman, Jobes and Silverman, 2006).

In Australia, Indigenous children have been found to be significantly at risk of suicide (De Leo et al., 2011). Reasons for the over-representation of Indigenous children within suicide statistics are not clear. Additional significance of the current research program lies in its exploration of factors associated with suicide in Indigenous children compared to other Australian children.

Those who lose a loved one from suicide experience a range of deleterious ramifications including, but not limited to, stigma, guilt, and depressive feelings (Cvinar, 2005; Jordan, 2001; McMenany et al., 2008). The present study aims to explore existing differences in the grief experience of parents bereaved through child suicide compared to OEC. Understanding the differences between bereavement processes will allow for more effective access to, and usage of, psychological, social and community supports.
1.6 Demarcation of Dissertation

The study of suicidology pertains to a spectrum of behaviours including thoughts of taking one’s own life (i.e., suicidal ideation), formulation of a plan and gaining the means to takes one’s own life, attempting to take one’s life and finally, suicide - the attainment of a fatal outcome (Krug, Dahlberg, Mercy, Zwi, Lozano, 2002). Stengel (1964) originally suggested that individuals, who attempt suicide, and those who die by suicide, are two distinct groups and it has since been argued that these two groups warrant separate consideration (Beautrais, 2001b, 2003b; De Leo, 2002). Whilst sharing common aetiological factors, these groups would differ in key ways, beyond lethality of method used (Beautrais, 2001b, 2003b; Bertolote & Fleischmann, 2005). As such, this research program investigates the remaining spectrum of suicidal behaviour, only in relation to any prior suicidal behaviour of the children who have died by suicide and OEC.

Critically, the current study did not attempt to generalise the experiences of grief of all parents who lose a child. Its scope is contained to those parents involved in the study who experienced the loss of a child through suicide or OEC. Caution is required if attempting to generalise to the general bereaved population. Rather, this thesis aims to provide a platform for participating parents to share their stories of loss.

Similarly, it is pertinent to stipulate that this thesis does not purport to generalise the findings stemming from the case study component to all suicides of Australian children. Instead, the aim was to contextualise aggregate level findings on an individual level and, in this way, provide a ‘face’ to the issue of child suicide. It is also recognised that parents may be inclined to withhold information that they perceive could shed a negative light on their child, their family, or indeed themselves. However, the fact that this information is supplemented and cross-referenced with other data sources means this limitation is potentially minimised.
Finally, for the purposes of this program of research, a child is operationalized as an individual 15 years or younger. It is acknowledged here that this cut off between child and adolescent may be debatable. However, there are physical, sexual, cognitive, and social developmental differences between children and adolescents (Grøholt et al., 1998), and these two groups warrant separate consideration within suicidology. Despite potential issues, defining children using an age-related context is a prevailing schema used to distinguish them from adolescents and adults (Hendrick, 2000; James & James, 2008). The concept of child and childhood is discussed in more detail in Chapter Three (Section 3.2).

1.7 Dissertation Structure

Chapter Two provides a brief quantitative description of the prevalence of suicide among children and summarises the difficulties associated with the identification and subsequent reporting of child deaths as suicides. The chapter concludes with the presentation a profile of child suicide in Queensland. Chapter Three provides a theoretical framework relating to the discussion of suicide among children and indicates the overall rationale for this research program. Specifically, nomenclature and the concept of intent in the study of child suicide, the concept of child/childhood as a construct, and cognitive development in children in relation to the development of a concept of death will be discussed. A systematic review of the literature pertaining to child suicide is reported (Paper 1). Parental bereavement as a consequence of child suicide is then discussed. Finally, the theoretical perspective of the current research program is introduced before the rationale for each specific research aim of this dissertation is presented. Chapter Four describes the methodology framework of this research program, introduces the databases used, and the PA method of research.

The empirical results of the demographic, psychosocial, psychiatric factors associated with child suicide using aggregated data are presented in Chapters Five and Six. These two
chapters use a quantitative approach. Chapter Five outlines the methodology and results of a case-control study using data derived from the CDR (*Paper 2*). Within this chapter, demographic factors associated with child (10-14 years) and adolescent suicide (15-17 years), when compared with children and adolescents who have died by OEC, are described. In addition, this chapter describes differences and similarities in demographic, psychosocial, and psychiatric factors in child and adolescent suicide. Chapter Six outlines the methodology and results of a retrospective case-series study using data derived from the QSR (*Paper 3*). This study investigated the demographic, psychosocial, and psychiatric factors that are associated with suicides of Aboriginal and Torres Strait Islander children compared with other Australian child suicides in Queensland.

Chapter Seven assesses child suicide on an idiographic level. Individual level data was investigated using the PA method, supplemented and cross-referenced with QSR and CDR data. This chapter discusses and critiques the application of the PA method in the context of child suicide, before presenting intergroup differences (that is, the suicide group compared with OEC) along with individual case study presentations of six children who died by suicide whose parent was interviewed.

Chapter Eight presents a thematic analysis of the grief experiences of parents whose child died by suicide compared to parents whose child died by OEC. The final chapter synthesises the main findings of the current program of research in relation to each aim and discusses the clinical implications of these. The limitations are then acknowledged and future research recommendations are offered. Finally, an epilogue provides a brief reflection of the PhD Candidate’s personal experience of conducting research of this sensitive nature.
Chapter 2

Background

This chapter provides a description of the occurrence of suicide among children at a national (Australia-wide) level and briefly contextualises this within an international perspective. Specifically, it aims to demonstrate the tragic occurrence of child suicide rather than present a cross-cultural comparison. Section 2.2 discusses the issues and difficulties that have been empirically demonstrated to impact the accuracy of suicide statistics. Misclassification and under-reporting, including hesitation to rule cases involving children as suicide due to prevailing historical stigma, are specifically considered. Finally, Section 2.3 presents a profile of child suicide at a state (Queensland) level.

2.1 Child Suicide in Numbers

Global suicide rates for children aged 5-14 years were last reported to be 1.5 and 0.4 per 100,000 for males and females, respectively (WHO, 2002). However, suicide in children younger than 10 years old is considered rare (Dervic, Brent, & Oquendo, 2008). Data for both male and female children aged 5-14 years is available for 107 of the 194 WHO Member States. However, data in developing countries is often non-existent (Wasserman, Cheng, & Jiang, 2005), consequently suicide data in the developing countries of Africa, South and Central America, and Asia are lacking (Apter et al., 2009; Kõlves & De Leo, 2014).

Several countries have observed rising child suicide rates since the 1960s (De Leo & Evans, 2003; Dervic et al., 2006; Grøholt et al., 1998; Moens et al., 1988). A recent systematic analysis of worldwide (81 countries and territories) suicide rates among children aged 10-14 years, using WHO data and population data from the World Bank Dataset, reported that, the biggest increase in suicide rates in children have occurred in Central and
South American countries (Kõlves & De Leo, 2014). Overall, in the last two decades, there has been a minor decrease in suicide rates in male children and a slight increase in female children (see Kõlves & De Leo, 2014). More specifically male child suicide is highest in former Soviet Union countries (Kazakhstan and Russian), while for girls the highest suicide rates are found in Latin American countries Guyana and Suriname (see Kõlves & De Leo, 2014). The child suicide rate in Australia is lower in comparison to international rates, and overall, a slight decrease in the suicide rate has been observed in this age group (see Kõlves & De Leo, 2014). Several reasons for differences in child suicide rates have been put forward. These include: cultural or religious beliefs influence on societal attitudes toward suicide (Kelleher, Chambers, Corcoran, Williamson, & Keeley, 1998); intra-country differences in cause of death classification (Kõlves & De Leo, 2014); and, socio-economic factors (Kõlves, 2010).

Statistics on child suicide within Australia are available from a number of sources, creating varying pictures of suicide mortality. Following recent recommendations, the Australian Bureau of Statistics (ABS) has overcome its habitual reluctance about the topic and started to present data for suicide deaths occurring nationwide in this age group. Previously, child suicides were included only in the total number of suicides reported by the ABS (ABS, 2014). The first presentation of suicide data in children aged 15 years and younger was aggregated in 5-year periods. This was likely done so that it would not be possible to isolate, and subsequently identify, individual cases due to the relatively small numbers. The following table outlines the raw number of suicide deaths in children in each Australian state or territory of usual residence during the time period 2008 to 2012. As can be seen in Table 2.1, Queensland had the highest number of suicides for children in 2008 to 2012, along with Victoria.
Table 2.1 *Number of Suicides for Children 5-14 years by State or Territory or Usual Residence, 2008-2012*

<table>
<thead>
<tr>
<th>State or Territory</th>
<th>Population¹</th>
<th>Number of suicides²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queensland</td>
<td>577 970</td>
<td>14</td>
</tr>
<tr>
<td>Victoria</td>
<td>654 062</td>
<td>14</td>
</tr>
<tr>
<td>New South Wales</td>
<td>873 780</td>
<td>12</td>
</tr>
<tr>
<td>South Australia</td>
<td>190 792</td>
<td>2</td>
</tr>
<tr>
<td>Western Australia</td>
<td>288 809</td>
<td>7</td>
</tr>
<tr>
<td>Tasmania</td>
<td>62 688</td>
<td>3</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>32 023</td>
<td>4</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>42 498</td>
<td>1</td>
</tr>
</tbody>
</table>


Speculation regarding the degree of influence the different classification systems of states and territories have on suicide statistics is well documented (De Leo, 2010). Intense debate within the scientific community regarding the accuracy of Australian suicide statistics exists and inconsistencies were illustrated using data from 2002 to 2003 (Bradley, Harrison, & Elnour, 2010; De Leo, 2010). These discrepancies were brought to light through a comparison of ABS data and Queensland Suicide Register (QSR) data (Williams, Doessel, Sveticic, De Leo, 2010). The QSR will be discussed in more detail in Section 4.3.2, and will be used to present a profile of child suicide within Queensland, 1990-2010 in Section 2.3.

The accuracy of available statistics also is an issue of contention. Indeed, underestimation of suicide rates is regarded as an international problem (De Leo, 2010; O’Donnell & Farmer, 1995). Several issues complicate this; for example, the impact of historical stigma (De Leo, 2010; Minois, 1999), and non-existent data on developing
countries (Khan, 2005; Wasserman et al., 2005). Postulation that current suicide figures, across all age groups, are not a true reflection - that suicide is ‘hidden’ - remains a topical issue in suicide research (De Leo, 2010). Research suggests that the underestimation of suicide due to under-reporting and/or misclassification may be even more exaggerated among children, compared with adolescents and adults (Beautrais, 2001a; Crepeau-Hobson, 2010; Fortune & Hawton, 2007; Hawton, 1986; McClure, 2001; Moens et al., 1988; Pritchard & Hansen, 2005; Shaffer, 1988). Understanding this misclassification is vital as accurate statistics are an important indicator in the determination of appropriate distribution of funding and focus of educational and awareness policies and programs (De Leo, 2010; De Leo, Burgis, Bertolote, Kerkhof, & Billie-Brahe, 2006; Lopez & Mathers, 2006). Furthermore, misclassification and under-reporting hinders the understanding of child suicide and the development of targeted suicide prevention practices (De Leo, et al., 2006).

2.2 Misclassification and Underreporting of Suicide in Children

Social discourse generally holds the presumption that childhood is associated with joy – as such, many find it difficult to imagine a child taking their own life (Kienhorst, Wolters, Diekstra, & Otte, 1987). Furthermore, the loss of a child is a complete aberration of our expectations regarding the normal life cycle; it challenges our existential assumptions of parents outliving offspring or indeed children dying at all (Braun & Berg, 1994). However, as illustrated above, child death by suicide is occurring and current statistics may not be a true reflection of the extent of the problem.

Several factors impeding the accurate identification, and subsequent recording, of suicides have been empirically researched and identified. These include, but are not limited to, hesitation from personnel involved in the determination of death as suicide and stigma.
associated with suicide. These issues along with others specific to involvement of children will be discussed below.

2.2.1 Hesitation to rule as a suicide

In Australia, deaths occurring in certain predetermined situations are required to be reported to the coroner, who then investigates them. Though heavily reliant on medical evidence, this investigative process is judicial (Freckleton & Ranson, 2006). Circumstances and causes of these reportable deaths vary by jurisdiction. However, in general, reportable deaths include:

- violent or unnatural deaths, for instance accidents, falls and suicides;
- deaths occurring in suspicious circumstances;
- the cause of death is unknown;
- the identity of the deceased is unknown;
- the death occurred in care, in police custody or during police operations; and,
- the death was the unanticipated result of medical care (Coroners Act, 2003).

Possible classifications of death are, generally, natural, accident, suicide and homicide – commonly referred to as the NASH system (Bertolote & Wasserman, 2009; Mayhew, 2007). When a death occurs, the intent (the NASH system), manner of death (e.g., hanging), and cause of death (e.g., asphyxiation) are assessed. In determining mode of death, a process of elimination, as opposed to a process of confirmation, is utilised (Bertolote & Wasserman, 2009; De Leo, et al., 2006). It is possible to classify a death as ‘undetermined’. This means that either the manner of death cannot be accurately determined, or the manner can be determined from the circumstances but the cause of death may be undetermined (Mayhew, 2007). Arguably, some cases involving suicide in children could be incorrectly coded as
‘accidental’ or ‘undetermined’ as the intent, manner and/or cause may be ambiguous (Jarvis, Boldt, & Butt, 1991; Knoll, 2009). This will be discussed in more depth in Section 2.2.3.

Crepeau-Hobson (2010) investigated the factors considered by coroners in determining a death to be a suicide in cases involving children and the influence of individual differences, such as years of experience, gender, and number of cases encountered per year, had on the decision making process. Medical examiners were chosen as participants as they often utilise their expertise in the death investigation process. Whilst difficulties with recruitment led to a smaller than anticipated sample size, the questionnaire was completed by a final 94 participants.

Responding to a survey formulated on a review of extant child suicide literature and a vignette depicting the hanging death of a child, participants indicated that age was a particularly influential factor in the determination of a suicide death. Two-thirds of participants indicated that there was a cut-off age in which they would not classify a death as a suicide regardless of the circumstances. The minimum age reported differed substantially, from 2 years to 12 years, with an average of 8 years. Of those respondents who indicated support for the use of an arbitrary cut-off age, 88% indicated that they would not classify a death as suicide unless the child was older than 10 years (Crepeau-Hobson, 2010). Furthermore, respondents indicated that more palpable factors were most influential in the decision making process, such as suicide notes and history of previous attempts. This is problematic as there is some empirical evidence suggesting that children do not customarily leave suicide notes (Batalis & Collins, 2005; Maris, Berman, Silverman, 2000; Schmidt, Müller, Dettmeyer, & Madea, 2002), are less likely engage in previous suicidal behaviour, and exhibit psychiatric difficulties (Grøholt et al., 1998; Schimdt, Müller, Dettmeyer, & Madea, 2002).
These results should be interpreted with some caution. The initial response was extremely low, some degree of response bias may exist, and results cannot be considered representative of individuals involved in the investigative process of child deaths. The author also highlights the potential impact of the self-report measure on respondents. In an effort to appear well informed on the subject of child suicide, participants may have indicated more factors that are influential than those actually considered in practice. Indeed, those factors considered in practice may differ substantially to those reported. Whilst the Crepeau-Hobson (2010) study presented here is American, and therefore not necessarily representative of Australian personnel involved in child death rulings, it nonetheless demonstrates the prevailing influence of individual and societal factors on the death investigation process.

### 2.2.2 Stigma

Stigma has frequently been cited as a historically-prevailing deterrent against classifying a death as suicide (De Leo, 2010; Minois, 1999). Indeed, stigma is most extremely reflected in jurisdictions where suicide is still considered a criminal offence (De Leo, Milner, & Wang, 2009), or religions where the taking of one’s life is an abomination against the provision of that life (De Leo, 2002, 2009). Arguably, religion remains a dominating influence on societal norms and individual attitudes, both of which may directly or indirectly impact on how suicide is perceived (Wasserman, 2009). Stigma surrounding suicide has important implications in the death classification process, for not only the decedent but also remaining family (Freckleton & Ranson, 2006; Mohler & Earls, 2001). Arguably, misclassification and under-reporting in efforts to avoid stigma and to protect the families are compounded in cases involving children (Joffe & Offord, 1990). In addition, stigma has been suggested as a unique complication in the grieving process for those left behind (Dunne & Dunne-Maxim, 2009). Differences regarding the grieving process of those bereaved by
suicide compared to other causes of death (OEC) will be discussed in more detail in Chapter Eight.

2.2.3 Child suicide misrepresented as accidents

Potentially, the methods used by children lend themselves to be perceived as accidents, such as, jumping from a height, running into traffic, or self-poisoning (Groholt & Ekeberg, 2003; Shaffer, 1974). For example, McIntire, Angle, and Schlicht (1977) investigated 1013 cases involving self-poisoning in children and adolescents aged 6-18 years. These authors reported that only 13% of these cases were unintentional self-poisonings. Furthermore, following the examination of comprehensive follow up information on 50 cases, only two remained classified as accidental poisonings. More recently, and in contrast, Freuchen and colleagues (2012) found the extent of possible mislabelling of suicides as accidents and vice versa in children 16 years and younger to be minimal. The phenomenon of experimental choking and asphyxiation games also complicates efforts to establish intent in hanging scenes (Andrew & Fallon, 2007; Knoll, 2009). There is also empirical evidence suggesting that the very methods perceived by adults to be tragic accidents are methods suggested by children as a means to end one’s life (Mishara, 1999).

Lourie (1966) discussed the cultural implications of adults’ tendencies to underestimate the intensity of children’s emotions and seriousness of suicidal behaviour or expression. An adult’s perception of life events is arguably very different to the perception of a child. Indeed, Hug-Hellmuth stated “no event among the abundant phenomena of human life is insignificant for the child” (1912/1965, p. 499).
2.3 Profile of Child Suicide in Queensland, 1990-2010

As was demonstrated in Section 2.1, Queensland was found to have higher incidence of child suicide compared to other Australian states. The data used for the following profile of child suicide in Queensland was derived from the QSR. The QSR is a comprehensive suicide mortality database maintained by the Australian Institute for Suicide Research and Prevention (AISRAP) since 1990 (De Leo, 2010). Each case of potential suicide is evaluated and classified into three levels: ‘Beyond Reasonable Doubt’ (BRD), ‘Probable’, or ‘Possible’ (De Leo, Sveticic, & Kumpula, 2013). The QSR will be discussed in more detail in Section 4.1 (Chapter 4).

Between 1990 and 2010, there were 742 suicides (total number of BRD and probable cases) of individuals 19 years and younger registered within the QSR. Of the 742 recorded suicides, 70 (9.4%) were of children aged 14 years or younger. The youngest person to die by suicide was a 9-year-old child. Mid-year population estimates, sourced from the ABS (ABS, 2011), and incidences of suicide, derived from the QSR, were used to calculate suicide rates (per 100,000/year) among children aged 10-14 years in Queensland (see Figure 2.1). It is pertinent to note that smaller numbers makes rates more volatile and, thus, appropriate caution should be applied. Figure 2.1 also denotes moving averages of suicide rates of children aged 10-14 years in Queensland. Both the three- and five-year moving averages were calculated to account for the small sample size of each individual year of data and the resulting variation in rates from year to year. As depicted in Figure 2.1, both approaches provided a consistent demonstration that, on average, child suicide rates rose in the 2000s relative to earlier years.
Overall, almost two-thirds (61.4%, 43 suicides) were male; (38.6% were female, 27 suicides). The majority of children used hanging (87.1%, 61 suicides), with no significant differences between method choice and gender. The majority of suicides occurred within the child’s place of residence (78.6%, 55 suicides). Other suicide sites included the residence of others (5.7%, 4 suicides), other buildings (2.9%, 2 suicides), bushland area (5.7%, 4 suicides), urban parklands (1 suicide), other urban spaces (e.g., car park, 1 suicide), and other non-urban space (e.g., paddock, 1 suicide). The suicide sites of two cases were unknown (2.9%).

Given the relative low incidence of child suicide, consideration regarding the geographical presentation of suicides was required in order to mitigate the possibility of case
identification. The following map\(^3\) (Figure 2.2) presents the incidence of child suicide by local government areas (LGA). Cases involving a child identified as Aboriginal or Torres Strait Islander are highlighted in red.

Figure 2.2. Incidence of suicide of Indigenous and other Australian children aged 10-14 years, Queensland, 1990-2010.
As previously mentioned, suicide rates across the lifespan are consistently higher in Indigenous populations throughout the world (De Leo et al., 2011). This is also the case with Queensland’s Indigenous children. A recent study (Paper 3 of this thesis, see Chapter 6) found suicide among Indigenous children younger than 15 years was 12.63-times higher than the suicide rate for other Australian children in Queensland (Soole, Kõlves, & De Leo, 2014b). Specifically, Indigenous males and females had a 13.23-times higher and 11.90-times higher rate than non-Indigenous males and females, respectively (Soole et al., 2014b). Of the 70 suicide deaths of children occurring in Queensland between 1990 and 2010, 35.7% (25 suicides) were of children who were identified as Aboriginal or Torres Strait Islander (Figure 2.3). Chapter 6 explores the demographic, psychosocial, and psychiatric factors associated with Indigenous child suicide when compared to other Australian children.

![Figure 2.3. Distribution of suicide of children aged 10-14 years, Queensland, 1990-2010 by ethnicity.](image-url)
2.4 Chapter Summary

Child suicide is a global public health problem (Kõlves & De Leo, 2014). De Leo (2010) stated that suicide across the life span would likely always be under-reported. This argument is upheld here and fortifies the severity of the presented statistics. This chapter served to provide an overview of the extent of the problem of child suicide at a state (Queensland) level and outline several issues of pertinence to suicide statistics and the potential impact this has on childhood suicide statistics, including misclassification and underreporting.
Chapter 3

Theoretical Framework

The previous chapter provided a quantitative overview of child suicide both at a national level and within an international context, as well as a descriptive profile of child suicide within Queensland specifically. This chapter will contextualise the current discussion of child suicide before presenting a comprehensive overview of the research conducted thus far on the subject. Specifically, the nomenclature of suicidal behaviour will be defined in Section 3.1 and the implications of intentionality in the operationalisation of suicide in cases involving children will be discussed. The concept of child and childhood will then be examined in Section 3.2, which also justifies the age group examined within this program of research. Section 3.3 will briefly discuss child cognitive development in its relation to the development of concept and understanding of death in children. This chapter will also present a systematic critical review of extant studies conducted in reference to suicide in children aged 15 years and younger. Since suicide does not end with the suicidal act itself, and the consequences of parental bereavement will be considered in Section 3.6. Finally, the theoretical perspective informing this program of research, specifically the ecological model, will be outlined. In concluding this chapter, the particular research aims used to guide this program of research are delineated.

3.1 Operationalisation of Suicide

The study of suicidology pertains to a spectrum of behaviours including thoughts of taking one’s own life (i.e., suicidal ideation), formulation of a plan and gaining the means to take one’s own life, attempting to take one’s life, and, finally, suicide - the attainment of a fatal outcome (Krug et al., 2002). Of pertinence is that this spectrum of behaviour is not
mutually exclusive nor do individuals necessarily move through it in a streamlined continuum (Bertolote, Fleischmann, De Leo, & Wasserman, 2009; Miller & Eckert, 2009).

Within popular social discourse, an inherent understanding of the term suicide has been constructed: the act of taking one’s own life. However, the operationalisation of suicide and suicidal behaviours has often been an issue of contention within the research community (De Leo, et al., 2006). The WHO provides a frequently-used definition where suicide is a “deliberately initiated [act] and performed by the person concerned in the full knowledge, or expectation, of its fatal outcome” (1998, p. 75). More recently, stemming from research findings derived from the WHO/EURO study (Kerkhof, Schmidtke, Bille-Brahe, De Leo, & Lonnqvist, 1994), the aforementioned definition of suicide has been slightly modified. Here, suicide is defined as “an act with fatal outcome, which the deceased, knowing or expecting a potentially fatal outcome, has initiated and carried out with the purpose of bringing about wanted changes” (De Leo et al., 2006, p. 12). The amelioration of the latter definition, and to other frequently used definitions, lies in its inclusion of the fundamental aspects of suicide: agency of the act, awareness of lethality, and intent (De Leo et al., 2006). In addition, this definition has applicability across all theoretical perspectives, remains culturally-normative, and free of value judgement (De Leo et al., 2006).

De Leo and colleagues (2006) reflected that the inclusion of intent within the definition of suicide is possibly the most controversial. The contention stems from the argument that intent is not directly observable – a criterion for scientific evaluation (Egel, 1999) – since it cannot be ascertained from the individual once the suicide has occurred (unless, perhaps, a suicide note is left). Furthermore, if the outcome is non-fatal, a myriad of factors may influence a person’s subsequent interpretation of their intent (De Leo et al., 2006). Another criticism of the concept of intent is due to the life-death ambivalence
associated with suicide (Maris et al., 2000). De Leo and colleagues wrote that “the suicidal individual is rarely 100% intent on dying, therefore, it would be more accurate to assert that he or she does not want to die, but death is just a more appealing option than living” (2006, p. 10). Following from this is the proposition that potentially there is more than one type of intent. For example, an individual may be attempting to cease suffering or alter circumstances; here, death by suicide is the means to achieve this.

Despite these issues, intent is a core characteristic of all definitions of suicide, and associated issues are offset by the pertinence of its inclusion (De Leo et al., 2006). Furthermore, De Leo and colleagues argued that the interpretative nature of intent, and its subsequent measurability, might be alleviated through the use of the Psychological Autopsy (PA) method. The PA method will be discussed in more detail in Section 4.2.1 (Chapter Four).

Adequate and consistent nomenclature of suicide has several important implications, including the appropriate distribution of funding and appropriately-focussed educational and awareness policies and programs (De Leo, 2010; De Leo et al., 2006; Lopez & Mathers, 2006). Of methodological importance is the argument that inadequate definition of suicide has contributed to the under-reporting or misclassification of suicides which, as previously mentioned in Chapter One, is most likely exacerbated with child suicides (Crepeau-Hobson, 2010; De Leo, et al., 2006; Hawton, 1986; Moens et al., 1988; Pritchard & Hansen, 2005; Shaffer, 1988). With such under-reporting and misclassification, reliable data cannot be presumed; subsequently, this affects the validity of studies and the advancement of knowledge in prevention (De Leo et al, 2006). These scientific and clinical implications for operationalisation highlight the practical implications and importance of a consistent, generalisable, and unambiguous definition for suicide (De Leo et al., 2006).
3.1.1 Intent in the context of children

As illustrated in the previous section, an important component in the operationalisation of suicide is that the act is deliberately self-initiated. In addition to distinguishing suicide death from other suicidal behaviours, as well as accidents and homicide, intentionality is of scientific and clinical importance (De Leo, et al., 2006), particularly when discussing child suicide. Historically, it has been argued that children are precluded from contemplating and engaging in suicidal behaviour due to their inability to cognitively understand death or “estimate degrees of lethality or outcomes of their self-destructive acts” (Pfeffer, 1997, p. 553). However, a growing body of evidence indicates that young children do plan, attempt, and die by suicide (Pompili et al., 2005; Pfeffer, 2000; Tishler et al., 2007). Indeed, most children have an understanding of both death and the concept of suicide by age eight (Mishara, 1998). Moreover, historical studies of early modern England indicate that suicide rates among children were considerably higher than they are today (Murphy, 1986).

As previously described, intent is often not indubitable, with the obvious impediment being that the individual who can unequivocally answer this question is deceased (Lindquist & Gustafsson, 2002). In practise, intentionality is often determined by explicit verbal and non-verbal communications (such as suicide notes or declarations), or established from other evidence, such as previous suicide attempts (Crepeau-Hobson, 2010; Timmersmann, 2005). However, children do not customarily leave suicide notes (Lourie, 1966). Indeed, the majority of individuals do not leave suicide notes, even in cases of adult suicide (Ho, Yip, Chiu, & Halliday, 1998; Omalu, et al., 2005). Further, studies suggest that children are less likely to communicate intent (Schmidt et al., 2002; Grøholt et al., 1998). Difficulties in determining intent when explicit evidence was unavailable, particularly in cases involving
children, were identified as a key-contributing factor to the decline of accuracy of Australian suicide statistics (Senate Community Affairs Committee Secretariat, 2010). As previously mentioned, this was brought to light through the comparison between ABS and QSR data (see Section 2.1).

Considering these unique issues, suicidal behaviour in children has previously been demarcated as “thoughts and/or actions that if fully carried out may lead to serious self-injury or death” (Pfeffer, Conte, Plutchik, & Jerrett, 1979, p. 681). Here, the intent to cause self-harm or death is most important, regardless of the child’s cognitive understanding of the lethality, finality, or outcomes of their actions (Pfeffer, 1997, 2000; Tishler et al., 2007). A child’s concept of death will be discussed in more detail in Section 3.4.

3.2 Childhood as a Conceptually Distinct Life Stage

Children are not like us...They inhabit not our world but a world we have lost and can never recover. (Lively, 1987, p. 40).

Wyness (2006) argued that people within modern society might feel they have an intuitive understanding of what distinguishable features define children and childhood. However, these adult perceptions of childhood only stem from the fact that all adults were once children, from becoming parents, and existing in a society where children are a familiar aspect of the social and physical environment. Aries (1962/1973) postulated that ‘childhood’ is a social construct. Indeed, differentiation as a distinct life period was not widely recognised until the last two centuries – one of the ways in which this is demonstrated is through art work depicting children as miniature adults (Aries, 1962/1973).

Traditionally, chronological age was not used to define child; however, Hockey and James (2003) discern that age is now pivotal in the characterisation of a child. This is clearly
demonstrated in a legal context where a child is described in terms of a minimum age (10 years) and maximum age (14 years) of presupposition against criminal responsibility across all Australian jurisdictions (Criminal Code Act, 1899). Whilst research interest in youth suicide has grown, previous research has tended to focus on young people older than 15 years, due to inadequate sample sizes for child suicides younger than 15 years. Extant literature, which does include children, has predominately grouped children and adolescents together for analysis and discussion (Sarkar et al., 2010; Tishler et al., 2007). However, MacLean (1990) argued that children and adolescents are distinct from each other and warrant separate consideration in order to delineate differences in risk and the protective factors and manifestation of these across the lifespan. Indeed, children and adolescents differ in terms of physical, sexual, cognitive and social development (Grøholt et al., 1998; Sarkar et al., 2010).

Within the research sphere overall, how ‘child’ is defined, and in what age bracket childhood occurs, is non-specific and is often dependent on the discipline or context to which it is being discussed. Within suicidology, children tend to be categorised as 5-14 years, and adolescents/youths as 15-24 years. Similarly, the ABS (2011) describes a child as younger than 15 years old for census purposes. However, Tatz (2005) predicates no social or sociological reason for this form of age-binding of children and youth.

As previously mentioned, children and adolescents differ in terms of physical, sexual, cognitive, and social development (Sarkar et al., 2010). Biological age is often used to portray a child’s progression through these changes. Whilst there is an approximate trajectory for these development stages, using age-related schema without consideration of social and other forces is considered precarious (Boocock & Scott, 2005; James & James, 2008). For example, the transition from childhood to adolescence is often marked with the onset of
puberty (White, Hayes, & Livesey, 2010). However, there is large variation in the onset of puberty due to genetic, environmental, and social influences. For example, the average age of puberty onset as evidenced by menstruation for females has declined substantially (Tanner, 1973; Whincup, Gilg, Odoki, Taylor, Cook, 2001). Some empirical evidence suggests weight status and obesity could explain earlier menarche in females (Kaplowitz, Slora, Wasserman, Pedlow, & Herman-Giddens, 2001; Lee et al., 2007). This is an obvious concern if adolescence or young adulthood was solely perceived as a physical occurrence. Given the social and other forces at play, childhood has been defined as “the life period during which a human being is regarded as a child, and the cultural, social and economic characteristics of that period” (Frones, 1994, p. 148).

Despite the potential difficulties associated with defining ‘child’ in this age-related context, as outlined above, this definition continues in modern society as the distinguishing feature of this life stage (Hendrick, 2000). While problematic, doing so allows the “establishment of uniformly applicable boundaries to separate children from adults” (James & James, 2008, p. 7).

Significant increases of both fatal and non-fatal suicidal behaviours are consistently observed after the age of 15 years (Bertolote & Fleischmann, 2009; Pelkonen & Marttunen, 2003; Spirito & Esposito-Smythers, 2006). Does this increase hide a distinct change in this age period? In a large cross-sectional survey (N = 3332), Patton and colleagues (2007) found that pubertal stage was associated with increased prevalence, of deliberate self-harm (DSH), a known risk factor of suicide, particularly in girls. Development of a deeper understanding of the pathways to suicide in children may enhance efforts in the intervention of suicidal behaviour and prevention of these behaviours in adolescence and adulthood (Fortune, Stewart, Yadav, & Hawton, 2007; Grøholt et al., 1998). In addition, it is only reasonable that
recommendations for prevention targeted to specific age groups should be derived from appropriate sample observations.

3.3 Cognitive Development

Immature cognitive development and subsequent understanding of death has been suggested as precluding children from engaging in suicidal behaviour. Current understanding of children’s comprehension of death has customarily derived from three primary theoretical perspectives: psychoanalytic; Piagetian; and, more recently, intuitive theory (Slaughter & Griffiths, 2007). Early works on children’s developmental acquisition of death was primarily psychoanalytically driven. These studies concentrated on children’s emotional responses to death and used open-ended questions and projective techniques, such as structured play and drawing (Nagy, 1948). Later, research explored children’s understandings of death as a function of their cognitive development, as outlined in Piagetian stages of cognitive development, and most commonly employed structured interviews (Slaughter, 2005). More recently, intuitive theory-orientated researchers describe children’s concepts of death in terms of their accumulation of knowledge regarding biology (Slaughter & Griffiths, 2007).

Death is not a singular construct (Speece, 1995). Rather, it is comprised of multiple components, which are prerequisite to obtaining an understanding (Orbach, 1988). Piaget’s Theory of Cognitive Development offers a practical framework to discuss the acquisition of a mature understanding of death in children. It purports that children’s cognition negotiates four discrete stages: sensorimotor, preoperational, concrete operational and formal operation. Each of these stages has characteristic ways of children perceiving and understanding the world around them. Research has shown that children aged between 7 and 11 years old typically have concrete operational levels of cognitive development. This means that children predominately think in dichotomous ways thereby lacking the ability to approach different
circumstances from abstract and logical perspectives (Pfeffer, 1997). In doing so, children of this age often exhibit rigid thinking and are unable to formulate multiple resolutions to problematic situations. As children enter the formal operational stage after the age of 11, they can think more logically, more abstractly, and in multiple ways. As touched on during the discussion of intent, it has been suggested that, as a result of their immature cognitive development, a child between the ages of 7 and 11 may underestimate the lethality and finality of self-destructive behaviour (Kane, 1979; Pfeffer, 1997).

3.4 Concept of Death

Adequate understanding of children’s concept of death and acquisition of this understanding is of pertinent relevance to child suicide. Predominately, conceptualisation of children’s understanding of death has been investigated using biological markers of death, including concepts of universality, irreversibility, non-functionality, and causality (Poltorak & Glazer, 2006; Speece & Brent, 1984). Guided by Piagetian theory, researchers within this study defined a child as having acquired a mature understanding of death when they could understand each of these components (Slaughter, 2005). These concepts are defined in Table 3.1 (Kenyon, 2001; Mishara, 1999; Poltorak & Glazer, 2006). The component ‘personal mortality’ is related to Universality and refers to a child’s deeper understanding that, not only do all living things die eventually, but that ‘I will die’.
Table 3.1 Conceptualisation of the Understanding of Death in Children

<table>
<thead>
<tr>
<th>Component</th>
<th>Mature understanding</th>
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<tbody>
<tr>
<td>Universality (applicability, inevitability,</td>
<td>All living things, and only living things, must die eventually. Also “I will die”</td>
</tr>
<tr>
<td>personal mortality)</td>
<td>Once a living thing dies, the physical body of that thing cannot be brought back to life again</td>
</tr>
<tr>
<td>Irreversibility (finality)</td>
<td>that thing cannot be brought back to life again</td>
</tr>
<tr>
<td>Non-Functionality (cessation)</td>
<td>Functions of the physical body ceases at time of death</td>
</tr>
<tr>
<td>Causality (unpredictability)</td>
<td>Understanding of internal (for example, illness and old age) and external (for example, accident) causes of death</td>
</tr>
</tbody>
</table>

Nagy’s (1948) early research on children, aged 3-10 years, explored their ideas of what death is like and what happens after death. Nagy (1948) found that even some of the youngest children had an awareness of death, which progressed through age-related stages, similar to Piagetian stages of cognitive development. Before mastery of Universality, children believed that death could be avoided if one was cautious enough (Kenyon, 2001; Nagy, 1948; Slaughter & Griffiths, 2007). Irreversibility requires understanding that death is final; before the acquisition of this component, a child believes death to be a state one can return from (Speece & Brent, 1984). Mishara (1999) likens this irreversibility to the sleep-like state depicted in fairy tales, such as Snow White or Sleeping Beauty. Children who have not yet grasped the component of Non-Functionality – functions of the physical body cease at time of death – suggest those who die are still able to do and think things similar to the living (Slaughter, 2005; Speece & Brent, 1984). Before the acquisition of Causality, children can
personify death. Here, death is personified as a sentient being, like the ‘grim reaper’ (Nagy, 1948), who can sometimes cause people to die for perceived wrong-doing (White, Elsom & Prawat, 1978).

There is some contention within the literature pertaining to the age by which children acquire understanding of each component. Nonetheless, as children’s understanding of death quickly begins mature, Universality and Irreversibility are often the first sub-components acquired, generally by 5-7 years of age (Dyregrov, 2008; Kenyon, 2001; Slaughter, 2005). Mastery of the other components (Non-Functionality and Causality), are acquired later and are mirrored by more general cognitive development. One possible reason for this is that irreversibility and universality are more concrete and tangible concepts. In contrast, Non-Functionality – the understanding that the physical body ceases at time of death – requires an understanding of the more abstract biological functions of the human body (Slaughter, 2005). Similarly, there are numerous internal (for example, illness and old age) and external (for example, accident) causes of death that must be understood before a child can fully comprehend Causality (Slaughter, 2005).

Mishara (1999) interviewed 65 public school children aged 6-10 years. The study aimed to explore children’s understanding of death, suicide, their concept of life, and how knowledge of these concepts had evolved. In addition, the study also explored the influence their personal experiences had on these concepts. This study extended previous research by including children who did not know the meaning of the word ‘suicide’. Mishara (1999) argued that, whilst a child may not comprehend the word ‘suicide’, they may still be familiar with the phrases ‘killing one self’ or ‘taking one’s own life’.

Mishara (1999) found that many of the children younger than seven years old (and, indeed, some of the children older than seven years) did not know the meaning of the word
‘suicide’. However, only three of the six-year-old children were unable to articulate what ‘killing one self’ meant. Children who were aged eight years and older were found to have a mature concept of suicide and, overall, the majority of children even the ones unable to understand the word ‘suicide’ were able to communicate numerous and realistic methods of suicide. As discussed previously in Section 2.2.1, coronial reluctance to determine a suicide verdict with a child can stem from the belief that children do not adequately understand the irreversibility of death. However, this study found that 71% of children had acquired this component (Mishara, 1999). Mishara (1999) highlighted that a possible limitation of the study was the representativeness of the sample. Parents who gave permission for their child to participate could potentially be more open about death and suicide within the family home. Non-return of consent was deemed refusal to participate. The potential bias this may have caused to the sample is unknown, as there was no information about the characteristics of the parents who ‘refused’.

In addition to fundamentally recognising and accepting the components defined in Table 3.1, an adult understanding of death is multifaceted. It is intricately influenced by individual, social, cultural, and religious beliefs and traditions, and personal experiences (Kenyon, 2001; Slaughter, 2005). Indeed, it would be remiss to assume a level of understanding of death based solely on a child’s chronological age without considering the influence these factors have on the developmental process. For example, the acquisition of a mature concept of death could be potentially accelerated by:

- personal experience of the death of a loved one (Kane, 1979);
- experience of a terminal illness (Jay, Green, Johnson, Caldwell, & Nitschke, 1987);
- exposure to death and violence through media (Mishara, 2003; Wenestram & Wass, 1987);
- religiosity and cultural practices (Candy-Gibbs, Sharp, & Petrun, 1985); and,
- current political climate (Mahon, Goldberg, & Washington, 1999; Schonfeld & Smilansky, 1989).

Other individual influences on the concept of death, such as demographic factors and emotional state, have also been explored but have yielded conflicting results (Orbach, Gross, Glaubman, & Berman, 1986; Slaughter, 2005).

The exact stages and the trajectory of the children’s acquisition of death components have been debated (Mishara, 1999). However, the general consensus of researchers is that children’s understanding of death matures gradually and changes over time (Mishara, 1998; Poltorak & Glazer, 2006). Children generally have an understanding of both death and the concept of suicide by age eight (Kane, 1979; Mishara, 1998), and some children progress more rapidly in their understanding than others (Speece & Brent, 1984). Thus, the development of concept of death is not necessarily a homogeneous progression for all children. However, overall, most researchers maintain the developmental trajectory outlined here. Furthermore, a child’s personal intent to cause self-harm or death is most important, regardless of the child’s cognitive understanding of the lethality, finality, or outcomes of their actions (Pfeffer, 1997; Pfeffer, 2000; Tishler et al., 2007). Indeed, regardless of arguments pertaining to cognitive development and the implications in children’s concepts of death, children are dying (see arguments made by MacLean, 1990).
3.5 Suicide in Children: A Systematic Review (Paper 1)

3.5.1 Notes

This paper is reproduced from Soole, R., Kõlves, K., & De Leo, D. (2014). Suicide in children: A systematic review. This paper is currently in press in Archives of Suicide Research (Impact Factor 1.639). The copyright specifications of this journal permit the inclusion of this paper within this dissertation.

The PhD Candidate is the first author and was responsible for database searches, article review and writing of the manuscript. The second and third authors are the principal and associate supervisor of the candidate respectively. Contribution included collaboration regarding which databases and keywords to use and guidance during review of articles was also provided. K. Kõlves contributed to the writing of the manuscript and D. De Leo revised the final manuscript critically for important intellectual content. All authors read and approved the final manuscript.


3.5.2 Overview and contribution of paper to dissertation

Extant literature has predominately focused on suicidal behaviours among individuals aged 14 years and older or has grouped children and adolescents together for analysis. The objective of the following systematic literature review, using the principles of the PRISMA statement, was to provide an overview of the studies conducted on factors related specifically to child (aged 14 years and younger) suicide. Articles were identified through a systematic
search of Scopus, MEDLINE and PsychINFO. Key words were: ‘children’, ‘suicide’, ‘psychological autopsy’, and ‘case-study’. Additional articles were identified through a manual search of reference lists and discussion with colleagues. In total, fifteen published articles were identified and included: eight PA studies and seven retrospective case-study series.

3.5.3 Introduction

Whilst there has been growing research interest in adolescent and youth suicide, few contemporary researchers have focused specifically on children (Pompili et al., 2005), except through case series (Tishler et al., 2007). Indeed, there have only been two non-systematic reviews of the literature pertaining specifically to child suicide (Dervic et al., 2008; Westefeld et al., 2010). Previous studies that do include children (below the age of 15 years) have predominately grouped children with adolescents by discussing prevalence, typical methods, temporal variations and other descriptive elements all together (Tishler et al., 2007). Consequently, attention to predictive factors specific for children younger than 15 years of age has been very limited.

The definitions of suicide and suicidal behaviour have often been a contentious issue within the research community (De Leo et al., 2006). Arguably, the lack of standardised nomenclature has contributed to the under-reporting or misclassification of suicide cases, hindering reliability of data (De Leo et al., 2006). Underestimation could be especially marked in suicide cases of young individuals (Crepeau-Hobson, 2010; De Leo, 2010), affecting the validity of studies and the advancement of knowledge in prevention (De Leo et al., 2006).
One core characteristic of all definitions of suicide is the presence of intention to die. This aspect is particularly important when discussing suicide in children. In fact, children are often described as incapable to cognitively understand death or “estimate degrees of lethality or outcomes of their self-destructive acts” (Pfeffer, 1997, p. 553), and, as such, they have often been precluded from deliberately engaging in suicidal behaviour. However, empirical evidence suggests that most children have an understanding of both death and the concept of suicide by the age of eight (Mishara, 1998), and many are capable of planning, attempting and dying by suicide (Pfeffer, 2000; Tishler et al., 2007). Indeed, historical investigations of early modern England suggest that suicide during childhood represented a much larger proportion of total suicides than it does today (Murphy, 1986).

Childhood as a distinct life period was not widely recognised until the last two centuries (Aries, 1962/1973). However, Hockey and James (2003) discern that age is now pivotal in the characterisation of a child. The Oxford Dictionary (n.d.) defines a child as “a young human being below the age of puberty or below the legal age of majority”. Within research, the tendency to define ‘children’ as younger than 15 years stems from the consensus to group statistics in age bands of 5 years. Guided by this, this review distinguishes children from adolescents and defines a child as an individual younger than 15 years of age.

Several research methods are employed in the field of suicidology. One of the most widely used methods is the PA, which involves interviewing those close to the deceased (Knoll, 2008). Reviewing coronial records is also frequently adopted in suicidology. Both these methods are involved in the studies included in this systematic review, the main target of which is investigating the individual, family related and socio-environmental and contextual factors related to child suicide.
3.5.4 Method

3.5.4.1 Search methodology

This systematic review was conducted using the principles of the PRISMA statement (Moher, Liberati, Tetzlaff, Altman, & The PRISMA group, 2009). A visual representation of the identification, screening, eligibility assessment, and inclusion of studies is presented in Figure 3.1. The electronic search of databases Scopus, MEDLINE via Ovid) and PsychINFO (via EBSCOHOST) was conducted in December 2013 and literature sourced from 1966 to present. The search retrieved articles containing the following key words: child(ren) AND suicide AND ‘psychological autopsy’ in all fields and child(ren) AND suicide AND ‘case-study’ in all fields. The initial database search retrieved a total of 5,383 articles (Scopus n = 5,151, MEDLINE n = 108, PsychINFO n = 124).

3.5.4.2 Inclusion and exclusion criteria

The exclusion of non-English articles (n = 288) reduced the total number to 5,095. The within search functions allowing the specification of population age (limit to child[hood]) and keywords further reduced the total number of articles retrieved through database searching to 449 (Scopus n = 302, MEDLINE n = 87, PsychINFO n = 60). After duplicates were removed (n = 71), a total of 378 articles were included in the screening process.

Abstracts and titles were initially screened using the following eligibility for inclusion criteria: 1) article describes a primary research study (with the exception of previous meta-analyses and systematic reviews), 2) methodology applied is the PA method or retrospective case series and sample consists of children, 3) study outcome focused on suicide (exclusion
of non-fatal suicidality, that is, attempted suicide and suicidal ideation). This stage of initial screening eliminated a total of 243 non-relevant articles.

*Figure 3.1. Summary of article selection process*
Full text articles \((n = 135)\) were assessed using the following additional criteria: 1) data sources were clearly stated and reliable; and, 2) sample included specifically children aged 14 years and younger or separated children and adolescents in analyses. Studies that included children together with adolescents during analysis and discussion, thus preventing information specific to children to be extracted, were excluded. Four exceptions were the PA studies by Brent and colleagues (1999), Marttunen and colleagues (1991) and Shaffer and colleagues (1996), and the retrospective case study by Weinberger and colleagues (2001), which defined children as individuals aged 16 years and younger. Although this age cut-off deviates from the previously defined age-bracket for ‘child’, these studies were deemed near enough to the population we wanted to investigate. Conversely, two studies with very small sample sizes \((n \leq 13)\) presenting very limited descriptive information (only figures by gender and suicide methods) were excluded (Ağritmiş, Yayci, Çolak, & Aksoy, 2004; Goren, Gurken, Tirasci, & Ozen, 2003).

3.5.5 Results

A limited number of studies \((n=12)\) have investigated suicide in children, either as a separate population or as a subsample. Several articles \((n=7)\) compared children who died by suicide with adolescents. The 15 articles included in this review, consisted of eight studies employing PA methodology and seven retrospective case-study series. Table 3.2 presents a summary of the 15 published articles (from 12 studies).

Five PA studies included a control group utilizing either a living community sample matched on demographic characteristics, or accidental deaths. Only three studies consisted of just children aged 15 years and younger (from five published articles), while the remaining studies analysed children and adolescents separately or compared child suicides with adolescent suicides in analysis. With the exception of Beautrais’ study (2001a), which
consisted of 61 child suicides, the number of children in samples was small, generally less than 50 cases. The youngest ages of children in these studies were 8 (Grøholt & Ekeberg, 2003) and 9 years old (Beautrais, 2001a). All studies were conducted in developed countries, including New Zealand, Turkey, Singapore, England, Hong Kong, Finland, Norway and the USA.

Several key findings were identified. Suicide incidence and gender asymmetry increased with age and hanging is a frequently employed method of suicide by children. Compared to adolescents who die by suicide, lower rates of psychopathology are evident among child suicides and children consume alcohol less frequently prior to suicide. Parent-child conflict appears to be a salient precipitating factor for children. In addition, previous suicidal behaviour is a pertinent factor in child suicide.
### Table 3.2 Studies Examining Suicide in Children 14 Years and Younger

<table>
<thead>
<tr>
<th>Study</th>
<th>Country and Timeline</th>
<th>Sample (Age [years, range] and n)</th>
<th>Comparison group (Age [years, range] and n)</th>
<th>Suicide method</th>
<th>Precipitant</th>
<th>Psychiatric or behavioural difficulties</th>
<th>Prior suicidal behaviour</th>
<th>Other important findings</th>
</tr>
</thead>
</table>
| Beutrais (2001a) | New Zealand 1989-1998 | 9-14 years n = 61 | No comparison group | Hanging (78.7%) | Argument with a family member (70.5%) and/or disciplinary issue (26.2%)  
- Bereavement of immediate family (1 in 7) | 23% Mental health problems within a year of death  
1 in 3 known to school, mental health and/or social welfare authorities  
Overall, 16.4% had contact with services in year prior to death; more commonly females (29.4%; compared to 11.4% of males) | -- | -- |
| Coskun, Zoroglu, & | Turkey & <15 years | Age group Suffocation for both | Most common precipitating | -- | -- | -- | -- | -- |

- Number of suicides seems to be increasing  
- Incidence of suicide increases with age for both males and females, with twice as many suicides among 14 year olds (57.4%) than 13 year olds (26.2%)  
- Majority of suicides were male (72.1%)  
- 57.4% of individuals who suicided were Maori (64.7% of females and 54.6% of males who suicided were Maori)  
- Majority occurred in deceased residence (86.9%)  
- 32.8% left suicide notes  
- 9.8% family history of suicide  
- 45.9% lived in single parent or stepparent families, with 32.8% in nuclear families
<table>
<thead>
<tr>
<th>Study</th>
<th>Country and Timeline</th>
<th>Sample (Age [years, range] and n)</th>
<th>Comparison group (Age [years, range] and n)</th>
<th>Suicide method</th>
<th>Precipitant</th>
<th>Psychiatric or behavioural difficulties</th>
<th>Prior suicidal behaviour</th>
<th>Other important findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghaziuddin (2012)</td>
<td>USA 1992-2004</td>
<td>15-24 years n not reported</td>
<td>comparison</td>
<td>Turkey and USA</td>
<td>N.B. Firearm most common for USA 1992-1998</td>
<td>factors data available for Turkey only: Family conflict followed by academic failure in &lt;15 years Romantic relationship difficulties followed by psychiatric and physical illness for 15-24 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grøholt &amp; Ekeberg, 2003</td>
<td>Norway 1990-1992</td>
<td>≤14 n = 14 15-19 n = 113</td>
<td>Age group comparison</td>
<td>Hanging (92.8%)</td>
<td>Conflict with parents more often compared to adolescents (p = 0.03) and no romantic problems (p = 0.01)</td>
<td>Psychiatric difficulties less frequent in children (p = 0.008)</td>
<td>Less likely to state suicide intent (p = 0.001) or have made previous attempt (p = 0.02)</td>
<td>• 64% lived with both biological parents • Non-significant trend to leave suicide note less often</td>
</tr>
<tr>
<td>Hoberman &amp; Garfinkel (1988)</td>
<td>USA 1975-</td>
<td>&lt;14 n = 21 15-19 n = 208</td>
<td>Age group comparison</td>
<td>Hanging (52%) significantly higher</td>
<td>School problems (p = &lt;0.02) Arguments with</td>
<td>Children more likely to be described as having conduct disorder</td>
<td>Less likely to display prior suicidal behaviour than</td>
<td>• More likely to be described as angry or nervous (p = &lt;0.01) • More likely to be described as...</td>
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<tr>
<td>Study</td>
<td>Country and Timeline</td>
<td>Sample (Age [years, range] and n)</td>
<td>Comparison group (Age [years, range] and n)</td>
<td>Suicide method</td>
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<td>1985</td>
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<td>compared to adolescents</td>
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<td>parents more likely than romantic relationships ($p = 0.02$)</td>
<td>adolescents</td>
<td>impulsive ($p &lt; 0.0005$)</td>
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<tr>
<td>Loh, Tai, Ng, Chia, &amp; Chia</td>
<td>Singapore 2000-2004</td>
<td>10-14 $n = 22$</td>
<td>Age group comparison</td>
<td>Jumping from height (90.9%)</td>
<td>Academic stressors (59.1%, $p &lt; 0.001$)</td>
<td>Psychological disorders increased with age. Only 1 child (4.6%) with depressive disorder</td>
<td>Verbal suicidal warning (40.9% of children)</td>
<td>Suicide letter left (50% of children)</td>
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<td>15-19 $n = 65$</td>
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<td>Family problems (40.9%, $p &lt; 0.001$)</td>
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<td>20-24 $n = 101$</td>
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<td>Relationship problems less common in children (13.6%) compared to adolescents (38.5% and young adults [27.7%])</td>
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<td></td>
<td>Older groups significantly more likely to use other methods ($p = 0.028$)</td>
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<tr>
<td>Shaffer (1974)</td>
<td>England 1962-1968</td>
<td>12-14 $n = 30$</td>
<td>No comparison group</td>
<td>Carbon Monoxide Gas (43%)</td>
<td>Disciplinary crisis (36%)</td>
<td>Antisocial symptoms (17%)</td>
<td>Previous suicidal behaviour (46%). Those with disciplinary crisis as a precipitant event were less likely to have previous</td>
<td>Previous suicide attempt within family (13%)</td>
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<td>Emotional/Affective symptoms (13%)</td>
<td>Mixed Antisocial/Emotional/Aff</td>
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<td>Mental health issues within family (55%)</td>
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<td>Mixed</td>
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<td>Males significantly more likely to employ more lethal methods than females ($p = &lt;0.025$)</td>
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<td>Almost half ($n = 14$) left suicide</td>
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<td>Study</td>
<td>Country and Timeline</td>
<td>Sample (Age [years, range] and n)</td>
<td>Comparison group (Age [years, range] and n)</td>
<td>Suicide method</td>
<td>Precipitant</td>
<td>Psychiatric or behavioural difficulties</td>
<td>Prior suicidal behaviour</td>
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<td>Weinberger, Sreenivasan, Sathyavagiswaran, &amp; Markowitz (2001)</td>
<td>USA 1996-1997</td>
<td>11-14 n = 16 15-16 n = 30</td>
<td>No comparison group</td>
<td>Firearms (39%)</td>
<td>87% experienced a (or multiple) stressors</td>
<td>Alcohol/substance abuse (22%)</td>
<td>Previous suicide attempt (20%)</td>
<td>Predominately Hispanic</td>
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<td>Hanging (37%)</td>
<td>Serious argument within one day of death (54%)</td>
<td>Major depression (13%)</td>
<td>Females were significantly more likely to have had a previous attempt ($p=0.021$)</td>
<td>85% Residing with one or both biological parents</td>
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<td>Appeared depressed near time of death (48%)</td>
<td>History of suicidal ideation</td>
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<td>Positive toxicology results for alcohol, illicit drugs or medication (33%)</td>
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<td>Suicide letter left (37%)</td>
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<td>Study</td>
<td>Country and Timeline</td>
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<td>Comparison group (Age [years, range] and n)</td>
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<td>Brent, Baugher, Bridge, Chen, &amp; Chiappetta (1999)</td>
<td>USA 1989-1999</td>
<td>&lt;16 n = 35 ≥16 n=135</td>
<td>Comparison with living community sample (matched for age, gender, race, country of origin, and SES)</td>
<td>Firearm (65.7%) Hanging (25.7%)</td>
<td>Parent-child conflict (p ≤0.01)</td>
<td>Any 60.0%** Any mood disorder 42.9%*** Anxiety 22.9%* Substance 5.9% Conduct/Anti-social 17.1% *sig p &lt;0 **sig p &lt;.01 ***sig p &lt;.001 compared to controls</td>
<td>Previous suicide attempts significantly more frequent in child suicides (35.5%) compared to control group (0.0%, p ≤0.001)</td>
<td>• Presence of alcohol significantly less in child suicides (3.1%) compared to ≥16 suicides (37.8%, p ≤0.001) • Lifetime history of abuse greatly increased risk of suicide (OR = 42.1)</td>
</tr>
<tr>
<td>Freuchen, Kjelsberg, &amp; Groholt (2012a)</td>
<td>Norway 1993-2004</td>
<td>≤15 n = 42</td>
<td>Comparison with accidental deaths (same time period)</td>
<td>Hanging (66%)</td>
<td>Conflict (59%, p=0.01) – 35% of which were parent-child conflict and deemed minor by</td>
<td>Mental health problems (33%, p = 0.04) Sub-threshold depression (16%, p = 0.02)</td>
<td>Previous interest in suicide (46%, p = 0.01)</td>
<td>• Suicide deaths: 71% male and 29% female • Suicide site most commonly family residence for females (67%) and ‘elsewhere’ for males</td>
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<tr>
<td>Study</td>
<td>Country and Timeline</td>
<td>Sample (Age [years, range] and n)</td>
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<td>Freuchen, Kjelsberg, Lundervold, &amp; Grøholt (2012b)¹</td>
<td>Norway 1993-2004</td>
<td>≤15 n = 41</td>
<td>Comparison with accidental deaths (same time period, n = 43) Comparison with living community sample (matched by age and gender) n = 42</td>
<td>n = 42</td>
<td>the parents</td>
<td>Described as vulnerable and touchy (50%, p = 0.01) Described as impulsive and/or temperamental (14%, p = 0.03)</td>
<td>Prior attempt (12%, p = 0.03)</td>
<td>(47%) • Time of death generally in afternoon for males (57%) and females (50%) • Exposure to suicide in community or family (43%, p = &lt;0.01) • Suicide note left by 43% • No significant differences in toxicology results</td>
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<tr>
<th>Study</th>
<th>Country and Timeline</th>
<th>Sample (Age [years, range] and n)</th>
<th>Comparison group (Age [years, range] and n)</th>
<th>Suicide method</th>
<th>Precipitant</th>
<th>Psychiatric or behavioural difficulties</th>
<th>Prior suicidal behaviour</th>
<th>Other important findings</th>
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<tbody>
<tr>
<td>Freuchen &amp; Grøholt (2013)</td>
<td>Norway 1993-2004</td>
<td>&lt;15 years n = 42</td>
<td>Suicide note leavers vs. non-suicide note leavers</td>
<td>Hanging</td>
<td>--</td>
<td>No significant differences in mental health difficulties between suicide note leavers and non-note leavers</td>
<td>Note writers significantly more likely to have made previous suicide attempt</td>
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<td>Note writers significantly more likely to have displayed altered behaviour prior to suicide (p = 0.05)</td>
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<td>Non-significant (p = 0.07) trend towards note writers have poor child-parent communication</td>
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<td>Note writers and non-note writers significantly differed in total mean scores on Suicide Intent Scale (SIS; 8.4 vs 6.2 respectively, p = 0.005)</td>
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<td>Identified themes within suicide notes: addressed to someone (most commonly parents); reasons for suicide; declarations of love; settlement with self; settlement with others; forgiveness; consolations/well wishes; aggression; instructions; inner pain.</td>
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<td>Groholt, Ekeberg, Wichstrøm, &amp; Haldorsen</td>
<td>Norway 1990-1992</td>
<td>&lt;15 n=14 15-19 n=115</td>
<td>Comparison with living community sample</td>
<td>Hanging (93%, vs 35% of adolescents, Parent-child conflict (29%, p = 0.03)</td>
<td>Psychiatric disorder (43%, vs 79% of adolescents, p = 0.008)</td>
<td>Less likely to express suicidality (p = 0.001) and have</td>
<td>64% of children lived with both biological parents. More likely to live with both biological parents (n.s) than adolescents</td>
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<td>Study</td>
<td>Country and Timeline</td>
<td>Sample (Age [years, range] and n)</td>
<td>Comparison group (Age [years, range] and n)</td>
<td>Suicide method</td>
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<td>(1998)</td>
<td>(matched by age and gender) n = 889</td>
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<td>15-19 n = 19</td>
<td>No comparison group</td>
<td>Jumping from height N.B. Assessment included cases occurring 1992-1994.</td>
<td>Events characterized by disappointment or frustration, usually an interpersonal conflict or prolonged family discord Internal conflict: observed to hold “strong sense of guilt, obligation and responsibility”</td>
<td>One case identified as “severely withdrawn and functioning in fantasy with disorganized thoughts”</td>
<td>Suicidal ideation (59%)</td>
<td>• No intoxication at time of death (vs 51% of adolescents, p = 0.0002)</td>
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<td>17-19 n=36</td>
<td>Age group comparison</td>
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<td>Alcohol abuse or dependence less likely in children (18% vs 31% of adolescents) Adjustment disorder less</td>
<td>--</td>
<td>• Described as quiet, withdrawn, passive and uncommunicative (74%) • Low motivation, feelings of sadness, eating and sleeping disturbances, lethargy, school absences (95%)</td>
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</table>
**Study** | **Country and Timeline** | **Sample (Age [years, range] and n)** | **Comparison group (Age [years, range] and n)** | **Suicide method** | **Precipitant** | **Psychiatric or behavioural difficulties** | **Prior suicidal behaviour** | **Other important findings**
--- | --- | --- | --- | --- | --- | --- | --- | ---
Shaffer et al. (1996) | USA (June) 1984 - (May) 1986 | ≤16 n = 43 >17 n = 77 | Comparison with living community sample (matched by age, gender and ethnicity) n = 147 Age group comparison | -- | -- | Prevalence of most psychiatric diagnoses increased with age (71% of <13 years, 86% of 13-16 years and 95% of 17-19 years) Adjustment disorders with depressive features more common in younger male suicides Disruptive disorders more common in younger female suicides ADHD in 20% (n = 6) of males and 8% (n = 1) of females aged <17 years | -- | • Four subjects were younger than 12 years old • Male-to-female ratio increased from 0.75 in <13 years, to 3.5 in 13-16 years and 4.9 in ≤17 years
<table>
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<th>Study</th>
<th>Country and Timeline</th>
<th>Sample (Age [years, range] and n)</th>
<th>Comparison group (Age [years, range] and n)</th>
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<td>Less alcohol and substance abuse in 13-15 year olds (12% vs. 62% of 18-19 year olds)</td>
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<td>No alcohol and substance abuse in 12 years and younger</td>
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<td>Overall, 11 individuals had no diagnosis: these individuals were significantly younger than those with a diagnosis ($p = 0.001$)</td>
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3.5.6 Discussion

3.5.6.1 Demographics

Suicide incidence increases with age. Shaffer and colleagues (1996) suggested that this increase may be partly explained by developmental trajectories of important risk factors, such as psychopathology, which are more common in later adolescents. Some gender disparity seems to exist in regards to child suicide, with studies reporting that more suicide deaths occur among male children (Beautrais, 2001a; Freuchen et al., 2012a). However, Shaffer (1996) argues that gender asymmetry becomes more apparent with increasing age. Gender-related method preferences may be an underlying reason for the observed gender disparity, with males significantly more likely to use more lethal methods of suicide compared to females (Brent et al., 1999; Shaffer, 1974).

Prior research has shown that suicide within Indigenous populations is proportionately more frequent than in non-Indigenous populations (De Leo et al., 2011), and this aspect is particularly visible in children. In a 10-year retrospective study, Beautrais (2001a) examined the epidemiology of New Zealand children who had died aged less than 15 years. She found that Indigenous children predominated child suicide with almost 60% of suicides occurring among Maoris.

3.5.6.2 Suicide circumstances

Of the ten studies (out of 12) which identified predominant suicide method, children were found to use hanging most frequently in five studies. A number of geographical and temporal variations were observed. For example, in the USA, firearm suicides (Brent et al., 1999; Coskun et al., 2012; Weinberger et al., 2001) were found to surpass hanging cases, while jumping from a height was most common in Hong Kong (Lau, 1994) and Singapore.
(Loh et al., 2012). These characteristics mirror suicides among older age groups in those countries. Access to guns has been identified as an additional and pertinent environmental factor in suicide risk. Miller and colleagues (2002) found a positive and statistically-significant association between gun availability and suicide in children aged 5-14 years in the USA. Results suggested that children who lived in states with the highest access to guns were two-times more likely to die from suicide and, importantly, seven-times more likely to use a firearm (Miller, Azrael, & Hemenway, 2002). Almost forty years ago, Shaffer (1974) reported that the most common method employed by children was carbon monoxide poisoning, a leading suicide method in England and Wales at that time (Kreitman, 1976). In studies that included age-group comparisons, children were significantly more likely to die by hanging than their older counterparts who used more varying methods (Grøholt, et al., 1998; Hoberman & Garfinkel, 1988). The suicide site for children was most frequently the child’s usual residence. Interestingly, Freuchen and colleagues (2012a) found female children more frequently suicided within their home (67%), compared to male children (33%), who more frequently died ‘elsewhere’ (47% compared to 25% of females).

3.5.6.3 Individual factors

3.5.6.3.1 Personality traits

Several personality traits appear to be characteristic of children who died by suicide. In his classic study, Shaffer (1974) examined all suicides of children younger than 15 years of age in England and Wales that had occurred between 1962 and 1968. In his final sample of 30 children (70% male, 30% female), Shaffer (1974) systematically reviewed coroner reports, educational records, medical and psychiatric records, and social service records when applicable. Shaffer’s (1974) study illustrated two distinct “personality stereotypes”: 
a) Children, who were exceedingly intelligent, socially isolated, with mothers who had psychiatric issues; and,

b) Children who were aggressive, mistrustful, and sensitive to criticism.

Similarly, Hoberman and Garfinkel (1998) reported that, compared to adolescents who had died by suicide, children were more likely to be described as angry, nervous, and impulsive. In addition, children were reported as being more withdrawn, passive, and uncommunicative, compared to adolescents who had died by suicide (Lau, 1994). However, the generalisability of these studies is limited due to the small samples involved and it is unknown if these traits are characteristic of all children and adolescents in these countries. More recently, Freuchen and colleagues (2012b) found children who died by suicide were significantly more ‘vulnerable and touchy’ and ‘impulsive and temperamental’, compared to children who died by accidental deaths. There was also a tendency for children who died by suicide to be described as ‘worried’, compared to those children who died in accidents, though this failed to reach significance.

3.5.6.3.2 Mental health or behavioural difficulties

Adult suicide has been shown to commonly occur in the context of a pre-existing (and/or co-morbid) mental health disorders (Bertolote, Fleischmann, De Leo, & Wasserman, 2004; Cavanagh et al., 2003). However, children who die by suicide have lower rates of psychopathology. In the majority of reviewed studies, up to one-third of children who died by suicide had a detectable mental health issue at time of death (Beautrais, 2001a; Freuchen et al., 2012a, 2012b). In contrast, Brent and colleagues (1999) found a greater prevalence of psychopathology, reporting that 60% of children who died by suicide met the criteria for psychiatric diagnosis. However, in this study the sample of children who died by suicide was slightly older (up to 16 years old).
Specifically, children with affective disorders, disruptive disorders/conduct disorders, and substance abuse disorders may be more likely to exhibit suicidal behaviour than children without these psychiatric difficulties (Brent et al., 1999; Freuchen et al., 2012a, 2012b; Grøholt et al., 1998). However, these disorders are more frequent in suicide cases of adolescents (Grøholt et al., 1998; Loh et al., 2012; Marttunen et al., 1991; Shaffer et al., 1996). Brent and colleagues (1999) found that psychopathology, particularly substance abuse (single diagnosis or in the context of co-morbidity with mood disorders), was found more frequently, and conveyed a higher suicide risk in adolescents compared to children. The prevalence of developmental disorders, specifically Attention Deficit Hyperactivity Disorder (ADHD) was relatively low (Grøholt et al., 1998; Marttunen et al., 1991; Shaffer et al., 1996). However, a literature review found that young people with ADHD, particularly males, had significantly higher risk of suicide (James, Lai, & Dahl, 2004).

3.5.6.3.3 Contact with services

Only three studies reported whether children had received mental health evaluation or treatment prior to death. Overall, Beautrais (2001a) reported that less than one-fifth (16.4%) of children had been in contact with services in the year prior to death. Furthermore, contact with services was more common in female children (29.4%) than in males (11.4%). In the study by Freuchen and colleagues (2012b), children who died by suicide received help from school psychology services or child and adolescent psychiatry services in a similar manner (17% and 12% respectively). Interestingly, contact with services was similar for children who died in accidents (Freuchen et al., 2012b). In a Norwegian study, Grøholt and colleagues (1998) reported that over one-quarter of children (29%) had received psychiatric treatment (compared to 23% of adolescents) prior to death.
3.5.6.3.4 Prior suicidal behaviour

Children who died by suicide were found to have made a previous suicide attempt significantly more frequently compared to children who died in accidents (Freuchen et al., 2012a), and living control groups (Brent et al., 1999; Freuchen et al., 2012b). Between one-fifth and a little over one-third of children have made a prior suicide attempt (Brent et al., 1999; Loh et al., 2012; Weinberger et al., 2001). In contrast, Freuchen and colleagues (2012a) found that only 12% of children in their sample had previously attempted suicide. Nonetheless, this finding was significant in comparison to children who died in accidents, implicating prior suicide attempt as an important risk factor. A prior suicide attempt has been found to be significantly more likely in female children compared to male children (Weinberger et al., 2001), and in children who left suicide notes compared to those who did not (Freuchen & Grøholt, 2013).

Moreover, suicidal children aged twelve years and younger have been found to think and dream about death. This preoccupation with death has been significantly correlated with the degree of lethality in subsequent suicidal behaviour (Pfeffer et al., 1979). Indeed, Freuchen and colleagues (2012a) found that almost half of the children in their study who had died by suicide had previously displayed an interest in suicide. These findings suggest that suicidal communication in any form among children would need to be taken seriously, requiring immediate attention. Compared to adolescents, children have been found to be significantly less likely to have expressed prior suicide ideation and made suicide attempts (Grøholt et al., 1998; Hoberman & Garfinkel, 1988). However, parents indicated that their children displayed altered behaviour prior to suicide (Freuchen et al., 2012).
3.5.6.4 Family related factors

3.5.6.4.1 Family psychopathology

Psychopathologies in the family, such as parental mood and personality disorders and substance abuse, have been demonstrated to increase child and adolescent risk for non-fatal suicidal behaviour (King, 2009; Pfeffer, Jiang, & Kakuma, 2000; Pfeffer, Normindin, & Kakuma, 1994). However, evidence of a relationship between fatal suicidal behaviour in children and presence of psychiatric conditions in the family is lacking. Only one study here reviewed addressed mental health issues within the family. Shaffer (1974) found that over half of the children who died by suicide had family members experiencing psychiatric problems; however, these psychiatric problems also included suicide attempts made by parents or siblings (of children who had died by suicide). King (2009) points out that future research is required in order to delineate the mediating influence that shared genetic risk for psychopathology and the impact of negative family environment have on the familial transmission of both psychopathology and suicidal behaviour.

3.5.6.4.2 Family suicidality

Previous suicidal behaviour within the family has been demonstrated to be a predictive factor for suicidal behaviour (King, 2009; Pfeffer et al., 1994). Thirteen per cent of the children who had died by suicide in the Shaffer’s study (1974) had had a suicide attempt by a family member. Compared to children who had died in accidents, children who died by suicide were significantly more likely to have been exposed to a suicide within their community or family (2% vs. 43% respectively; Freuchen et al., 2012a).

Brent and colleagues (2002) examined the idea of the familial transmission of suicidal behaviour among depressed adults who had attempted suicide (defined as an action made
CHILD SUICIDE AND PARENTAL BEREAVEMENT

with intent to die which resulted in medical evaluation or treatment) and depressed adult non-attempters and their respective biological children. While children younger than 15 years of age were not examined separately in their analysis, the overall results suggested that children who had parents with a history of suicide attempts had a “6-fold increased risk for suicide attempt, relative to offspring of non-attempters” (Brent et al., 2002, p. 805). Furthermore, in a reanalysis of the same data, children who had a parent and sibling with previous suicidal behaviour were found to be at a heightened risk for suicidal behaviour at an earlier age than children without the presence of suicidal behaviour in their family (Brent et al., 2003). More recently, Spiwak and colleagues (2011) found that people exposed to both suicide attempt and suicide death of a parent or guardian during childhood were significantly more likely to self-report a suicide attempt of their own than individuals without such exposure. Furthermore, these significant findings remained after the authors controlled for demographic variables, psychiatric disorders, and adverse childhood events. Importantly, this study was conducted with a large sample (N = 34,653).

3.5.6.4.3 Parental divorce

Beautrais (2001a) found that almost half of the children who died by suicide lived in single parent or stepparent families. The implications of a non-intact family were not replicated in Norway in studies by Grøholt and colleagues (1998) and Freuchen and colleagues (2012b), who found that children who died by suicide more often lived with both biological parents (64% and 71%, respectively). Arguably, any association between parental separation/divorce and suicide is greatly mediated by other psychosocial factors (Gould, Greenberg, Velting, & Shaffer, 2003).
3.5.6.4.4 Parent-child relationship

Communication between parents and children who died by suicide was found to be significantly poorer compared to children who died by accidents (Freuchen et al., 2012b). In additional analyses comparing suicide note writers and non-note writers from data obtained in their PA study, Freuchen and Grøholt (2013) found a non-significant trend toward note writers having poorer communication with parents compared to those who did not leave a suicide note. Gould and colleagues (2003) highlighted the need to consider the potentially negative implications of an individual’s underlying psychological difficulties on relationships and communication. However, the association between poor communication with parents and suicide has been demonstrated to persist even when the presence of psychiatric disorders was taken into account (Gould, Fisher, Parides, Flory, & Shaffer 1996).

3.5.6.4.5 Adverse life events and home environment

A detrimental home environment has the potential to greatly influence suicidality in children (Tishler et al., 2007). Adverse events, such as physical and sexual abuse, witnessing or experiencing violence, and a history of maltreatment are all potential risk factors for suicidal behaviour (Tishler et al., 2007; Séguin, Renaud, Lesage, Robert, & Turecki, 2011). A lifetime history of abuse was found to convey a much increased risk for suicide in children (Brent et al., 1999).

The most commonly reported precipitant among children who died by suicide was family conflict, in particular parent-child conflict. Parent-child conflicts seem to be a salient precipitating factor for children (Brent, et al., 1999; Beautrais, 2001a; Coskun et al., 2012; Freuchen et al., 2012a; Hoberman & Garfinkel, 1998; Loh et al., 2012; Weinberger et al., 2001). These conflicts were often deemed as ‘minor’ by parents at the time (Freuchen et al.,
Parent-child conflict also appears more frequently in cases of children compared to adolescents, who more frequently experience romantic relationship issues (Coskun et al., 2012; Grøholt et al., 1998; Hoberman & Garfinkel, 1988; Loh et al., 2012).

Another psychosocial predictive factor associated with child suicide includes emotional interpersonal loss caused by death or separation (Beautrais, 2001a; Freuchen et al., 2012a; Freuchen et al., 2012b). Of note is that some precipitants occurred in the context of a real or perceived disruption or transition in the child’s living or educational arrangements or in the context of serious family issues (Beautrais, 2001a).

### 3.5.6.5 Socio-environmental and contextual factors

#### 3.5.6.5.1 School related factors

School-related psychosocial predictive factors include bullying, negative peer pressure, and perceived or real school performance problems. Compared to a living control group, children who died by suicide were found to have experienced significantly more bullying; however, no significant differences were found compared to children who died by accidental death (Freuchen et al., 2012b). Bullying is a detrimental problem affecting some children and experiences of bullying has been implicated in suicide attempts later in life (Klomek et al., 2009). Klomek and colleagues (2009) found that boys who experienced bullying at age 8 displayed an increased risk of suicide (up to age 25 years) if they were also experiencing depression or conduct disorder. For girls, this increased risk remained irrespective of these mental health difficulties.

Perceived or real school performance problems were another important precipitant identified in child suicide (Coskun et al., 2012; Hoberman & Garfinkel, 1988; Loh et al., 2012). Compared to adolescents who died by suicide, children who died by suicide were
significantly more likely to experience academic failure or difficulties as a precipitating event to suicide (Hoberman & Garfinkel, 1988; Loh et al., 2012). In addition, Shaffer's (1974) study revealed that an absence from school was a common occurrence in children younger than 15 years old who died by suicide. Although children were not analysed separately, in a study conducted by Gould and colleagues (1996), children and adolescents who were neither employed or at school at the time of their death had a heightened risk for suicide compared to a control group. These findings suggest that social isolation may be associated with suicidal behaviour (Gould et al., 1996).

3.5.6.5.3 Suicide notes

There is some empirical evidence suggesting that children do not customarily leave suicide notes (Batalis & Collins, 2005; Schmidt et al., 2002). Freuchen and Grøholt (2013) procured 23 suicide notes (left by 18 children) during a PA on 42 children who had died by suicide. The number of children who left notes was high (43%), compared to findings by Grøholt and colleagues (1998) in a previous Norwegian study (14%). Freuchen and Grøholt (2013) findings are comparable to the findings of Beautrais (2001a; 32.8%), Weinberger and colleagues (2001; 37%) and Loh and colleagues (2012; 50%). The aim of Freuchen and Grøholt (2013) study was two-fold: 1.) to assess the differences and similarities between children who left suicide notes and those who did not, and 2.) to explore and describe the themes present in the notes. Overall, no differences were revealed for demographic factors, psychiatric wellness, treatment received, stressful life events, or circumstances of suicide between children who left suicide notes and those who did not. Children who left suicide notes were, however, significantly more likely to have previously attempted suicide and were significantly more likely to display altered behaviour prior to suicide. Altered behaviour included being described as more joyful, affectionate, relaxed, tense, or silent. Freuchen and
Grøholt (2013) argued that the suicide notes gave an overall impression of higher suicidal intent compared to non-note writers, extending beyond the presence of a suicide note. Several themes were described by the authors: explanations for the suicide, declarations of love, and posthumous instructions.

3.5.6.5.2 Alcohol consumption prior to suicide

Overall alcohol and substance abuse was found to be less common in children compared to adolescents (Marttunen et al., 1991; Shaffer et al., 1996). In line with this, children have been demonstrated as consuming alcohol significantly less frequently prior to death compared to adolescents (Brent et al., 1999; Grøholt et al., 1998).

3.5.7 Concluding remarks

Suicide is a complex and multifaceted behaviour, which has not yet been extensively examined among children. Existing studies have especially been limited by relatively small sample sizes and conducted in developed countries. The retrospective nature of the PA case series and the potentially confounding influence of the passing of time on the reliability and validity of participant recall also represent a potential limitation (Brent, Perper, Kolko, & Zelenak, 1988). The parallel inclusion of a comparison group in studies would minimise this potentially confounding factor.

In addition to psychiatric factors, an interaction of psychosocial, environmental, and contextual factors seem to be associated with suicide in childhood. Evidence-based knowledge of the myriad aspects of child suicide is crucial to the understanding of child suicide and the development of targeted suicide prevention. There are few recent systematic literature reviews focusing on evidence in suicide prevention activities in children and adolescents (e.g., De Silva et al, 2013). Recognition, referral and subsequent effective
treatment of psychiatric difficulties and suicidal behaviour are essential. However, lower rates of psychopathology among children who die by suicide highlights the importance of other prevention initiatives such as restriction of means and psycho-education for parents, peers and school staff. In addition to understanding and mitigating the risk factors associated with child suicide, a better understanding of protective factors is required.

- End of Paper 1 -

3.6 Suicide Bereavement

When a person is bereaved by suicide, they are often described as a ‘suicide survivor’, particularly within the American literature. However, use of this term in the wider community can lead to misunderstandings (McIntosh, 2003; Seager, 2004). For example, an individual who attempts to take his or her own life and survives can be described as someone who has ‘survived’ a suicide attempt (Seager, 2004). Nonetheless, within suicidology research, this term is widely accepted as referring to those bereaved by suicide (Andriessen, 2004). In Australia, the expression ‘bereaved by suicide’ is commonly employed (McIntosh, 2003) and will be the term applied within the current research program.

While the exact number of people affected by a suicide is unknown, conservative estimates are that each suicide affects at least six people (Clark & Goldney, 2000; Shneidman, 1969). Several authors have since contended that this number is much higher, with estimates as large as 80 affected people to each suicide (Berman, 2011; Lukas & Seiden, 2007; Maple, Edwards, Plummer, & Minichiello, 2010; McIntosh, 2003; Wong, Chan, & Beh, 2007). Indeed, individuals bereaved by suicide were identified as a unique group highly relevant to suicide prevention in Cain’s seminal work stating they were the “largest mental health casualty area related to suicide” (Cain, 1972, p. 153).
Previous research has argued that, compared to other types of bereavement, the grief experience of those bereaved by suicide is inherently different. Specifically, individuals bereaved by suicide have been found to have increased difficulty in finding meaning in their loved one’s death – the question of ‘why’ – and in incorporating the death into their continuing lives (Bartik, Maple, Edwards, & Kiernan, 2013; Maple, Edwards, Minichiello, & Plummer, 2013; Jordan & McIntosh, 2011, Wheeler, 2001). A death by suicide has also been found to result in a plethora of additional and/or more intense emotions including feelings of guilt, shame, blame, responsibility, rejection, depressive feelings, and anger towards the deceased (Cvinar, 2005; Jordan, 2001; McMenany et al., 2008). These emotional consequences have also been found to result in long-term psycho-social dysfunction including protracted grief (termed complicated grief), and, in some cases, an increased risk for suicidality (Bartik et al., 2013; De Leo & Heller, 2008; Dyregrov, Nordanger, & Dyregrov, 2003; Jordan, 2001; Mitchell, Kim, Prigerson, & Mortimer-Stephens, 2004; Shear, 2012).

These complex feelings are often intermingled with feelings of social stigma and isolation. As previously discussed (see Section 2.2.2), stigma has frequently been cited as a prevailing deterrent against classifying a death as suicide (De Leo, 2010; Minois, 1999). Minois (1999) provides a historical review of negative societal reactions to suicide including, but not limited to, families being required to forfeit possessions, the imposition of large fines on families, and the denial of customary funeral practices. Dunne and Dunne-Maxim (2009) suggest that these negative reactions were inelegant attempts at suicide prevention. Unfortunately, all that was achieved was an extremely motivating reason for those bereaved to conceal the cause of death. Whilst these extreme reactions described may no longer occur, this history has served to create the prevailing stigma still associated with suicide today.
As stated by Maple and colleagues (2010), an individual’s grief experience is impacted by society’s view of death.

The support of a social network is imperative during bereavement, regardless of the circumstances surrounding the death (Cerel et al., 2008; Maple et al., 2010). There appears to be some consensus that suicide bereaved individuals can experience additional psychologically harmful ramifications of real or otherwise perceived diminishment of social support, increased negative community reactions; thus, they are placed at a greater risk of fragmented social interactions (Calhoun et al., 1980; Cerel et al., 2008; Jordan, 2001; Knieper, 1999; Provini et al., 2000; Seguin et al., 1995). Studies on public perception support the contention that stigma and social isolation is more likely experienced by suicide bereaved, compared to other forms of bereavement (Calhoun et al., 1980; Hjelmeland & Knizek, 2004; Maple, Cerel, Jordan, & McKay, 2014; Range, Bright, & Ginn, 1985).

Kinship relationship type between the bereaved and the deceased has been suggested as an important factor in the bereavement outcome (Cleiren et al., 1994; Schneider et al., 2011, Stroebe et al., 2007). Specifically, parents are more adversely affected following the death of their child (Green, 1990; Schneider et al., 2011; Stroebe, et al., 1993). Green (1990) stipulated that the death of a loved one qualifies as ‘traumatic’ when the death: involves the death of a child; is sudden; involves intentional harm; and/or, the body has been mutilated. The loss of a child is a complete deviation from parents’ expectations regarding the normal life cycle and challenges the existential assumptions that parents will not outlive their offspring (Braun & Berg, 1994, Mallon, 2008). This is further complicated by the sudden change in their social role as a parent (Mallon, 2008).

Several researchers have disagreed that the trajectory and bereavement process after suicide is more difficult compared to other forms of bereavement. It can be argued that earlier
research attempts at delineating empirical differences, and exploring commonalities of bereavement from suicide and bereavement from other causes of death (hypothesising that suicide bereavement is worse), have not been supported or have had mixed results (Cleiren et al., 1994; Murphy et al., 2003; Seguin et al., 1995; Sveen & Walby, 2007).

Whilst accepting that bereavement from suicide may share commonalities with other forms of bereavement, and that quantitative evidence for discernible differences is mixed, researchers have suggested that suicide bereavement differs from other forms of bereavement in its thematic content of grief (Jordan, 2001; Jordan & McIntosh, 2011). Indeed, reports from suicide bereaved individuals themselves lend weight to this postulation (Maple et al., 2010). Methodological weaknesses (such as the non-existence of comparison groups, non-standardised or non-validated measures specific to different forms of grief) could be one explanation for these discrepancies (Bailey, Kral, and Dunham, 1999; Ellenbogen & Gratton, 2001). Another explanation is that quantitative analysis may not adequately assess the complex, multifaceted nature of bereavement so qualitative analysis is more appropriate (Clark & Goldney, 1995; Ellenbogen & Gratton, 2001; Hjelmelad & Knizek, 2010; McIntosh, 2003). Thematic differences in the grief experience of parents bereaved by suicide compared to other causes of death will be presented in Chapter Eight.

3.7 Guiding Theoretical Perspective

Given its multi-faceted nature, a challenging task faced by researchers is how best to empirically investigate the reciprocal influencing factors within suicidality. Bronfenbrenner’s Ecological Model (1994) was used as the guiding theoretical framework for this program of research, determining the variables to explore and evaluate the relationships between those variables of interest. As will be discussed below, the application of an ecological model facilitates the examination of child suicide by providing a wider framework of individual,
environmental, and social system factors. Central to this perspective is the argument that, in order to understand the whole, it is necessary to understand the parts as they stand in relation to the whole (Bronfenbrenner, 1977).

Research into child development has become progressively mindful that a child exists and develops within a complex system, and this is increasingly reflected in understandings of child suicide. The systematic review presented in Section 3.5 demonstrated that suicide in children is associated with a complex interaction of individual, family related, social, and environmental factors. De Leo (2002) stated:

…in addition to individual predispositions, suicide is influenced by environmental and ecological characteristics, social context, and reigning circumstances. The factors that place individuals at risk for suicide are complex, interactive, interdependent, and often cumulative (p. 23).

Advancements in our conceptual understanding of suicidal behaviour can be accredited to several prominent theories (Wenzel & Beck, 2008). The work of Durkheim (1897/1951) is one of the earliest and most enduring theories of suicidal behaviour (Rudd, Trotter & Williams, 2007). Specifically, Durkheim posited that suicide was a reflection of social integration and moral regulation and his typology of suicide included four types of suicide – egotistic, altruistic, anomic, and fatalistic (Durkheim, 1897/1951). Recognition that suicide occurs within a socially-structured context (Durkheim, 1897/1951) arguably continues to have considerable influence on modern psychological perspectives of suicidal behaviour (Rudd, Trotter, & William, 2007). The early psychoanalytic work of Freud (1927/1953) also holds historical significance for the field of suicidology. Indeed, the pragmatic shift of suicide being discussed as a primarily moral and philosophical issue to one of clinical concern has been attributed to Freud (Ellis, 2001 as cited in O’Connor, 2011).
Several psychological theories have since made prominent contributions within the field of suicidology both within assessment and treatment aspects (Rudd, Trotter, & Williams, 2007). Table 3.3 provides a brief overview of selected models of suicidal behaviour. It is pertinent to note, however, the contents of Table 3.3 are not intended to be exhaustive, rather they are to illustrate the basic premise of some of the predominate models of suicide.
### Table 3.3 Selected Models of Suicidal Behaviour

<table>
<thead>
<tr>
<th>Model</th>
<th>Author(s)</th>
<th>Fundamental Proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress-Vulnerability</td>
<td>Zubin &amp; Spring (1977)</td>
<td>An individual has a predisposed and acquired level of vulnerability. Suicidal behaviour can manifest in individuals with higher levels of intrinsic vulnerability who encounter psychosocial stressors.</td>
</tr>
<tr>
<td>Theory of Psychache</td>
<td>Shneidman (1985)</td>
<td>Psychache is defined as a “general psychological or emotional pain that reaches intolerable intensity” (Shneidman, 1985, p. 13). Suicidality results from a combination of stress, referred to as “press”, perturbation (agitation) and psychache,</td>
</tr>
<tr>
<td>Escape Theory</td>
<td>Baumeister (1990)</td>
<td>Motivation of suicide and suicidal behaviour is to escape intolerable psychological pain.</td>
</tr>
<tr>
<td>Clinical Model of Suicidal Behaviour</td>
<td>Mann, Waternaux, Haas, &amp; Malone (1999)</td>
<td>Stress-diathesis model where suicide risk is influenced by a diathesis (e.g. propensity to experience suicidal ideation, impulsivity) in addition to psychopathology (stressor).</td>
</tr>
<tr>
<td>Cognitive-Behavioural Model of Suicidality</td>
<td>Rudd, Joiner, &amp; Rajab (2001)</td>
<td>An individual’s suicidal mode is characterised by four domains: cognitive, affective, behavioural and physiological.</td>
</tr>
<tr>
<td>Arrested Flight Model</td>
<td>Williams (2001)</td>
<td>Suicidal behaviour results from an individual’s inability to escape an intolerable situation</td>
</tr>
<tr>
<td>Model</td>
<td>Author(s)</td>
<td>Fundamental Proposition</td>
</tr>
<tr>
<td>-------------------------------------------</td>
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</tr>
<tr>
<td>Interpersonal-Theory of Suicide (IPT)</td>
<td>Joiner (2005)</td>
<td>A wish to die by suicide stems from two interpersonal constructs referred to as perceived burdensomeness (to loved ones) and thwarted belongingness (feelings of low belongingness or social isolation). Suicidal behaviour occurs when capability for suicide (fearlessness of pain, injury, and death) is acquired.</td>
</tr>
<tr>
<td>Integrated Motivational-Volitional Model (IMV)</td>
<td>O’Connor (2011)</td>
<td>“The IMV is a diathesis-stress model, which specifies the components of the pre-motivational (ideation/intent formation), and volitional (behavioural enaction) phases of suicidality” (O’Connor, 2011, p. 183).</td>
</tr>
</tbody>
</table>

From Table 3.3, it can be seen that attempts to understand suicide from a theoretical/conceptual standpoint have grown notably over the past three decades. Prinstein (2008) summarises:

…but few theoretical models have been offered to help understand self-injury in the manner that other manifestations of psychopathology have been examined. In particular, few studies have considered integrative models that address interplay between dynamic systems within the individual and between individuals and their environments (p. 2).

While attempts to understand suicide have been facilitated by the perspectives featured in Table 3.3, these perspectives are arguably restricted in their ability to provide a framework that fully allows the integration of the multifaceted phenomenon of child suicide within a single model (O’Connor, 2011; Henry, Stephenson, Hanson, & Hargett, 1993; Hong, Espelage, & Kral, 2011). One way to represent the complexity of child suicide is to frame the factors that may be related to child suicide using an ecological approach.

Originally introduced in the 1970s, Bronfenbrenner’s ecological model of human development was designed to address perceived shortcomings in existing models of development, which tended to have a narrower focus on individual factors with only peripheral acknowledgement of the wider reaching socio-environmental factors (Bronfenbrenner, 1994). As described by Bronfenbrenner at the time (1977): “much of contemporary developmental psychology is the science of the strange behavior of children in strange situations with strange adults for the briefest possible periods of time” (p. 513). Formalised as a theory in the 1980s, the perspective had become a widely adopted theoretical approach, and “studies of children and adults in real-life settings, with real-life implications,
[were] now commonplace” (Bronfenbrenner, 1986, p. 286). Bronfenbrenner continued to amend the model until his death in 2005 (Tudge, Mokrova, Hatfield, & Karnik, 2009).

Given the continued development of the model since it’s conception, Tudge and colleagues’ (2009) highlighted the importance of researchers explicitly reporting the version of the model which is being applied and stated that failing to do so is a disservice to both the model and the research undertaken. Tudge and colleagues’ (2009) posited that “scholars may, of course, choose to use an earlier version of the theory as the foundation of their research; they may also choose to base their study on only some of the major concepts of the developed version” of the model (p. 199).

In light of this recommendation, it is pertinent to explicitly note here, for theoretical and conceptual clarity, that the current program of research is framed within the context of Bronfenbrenner’s (1994) earlier work on ecological systems theory. Specifically the key concepts of Bronfenbrenner’s well-known five sub-systems, discussed below, are borrowed to help frame the array of complex and multi-faceted factors previously demonstrated (see Section 3.5) to be associated with child suicide. Indeed, “the primary scientific aim of the ecological approach is not to claim answers, but to provide a theoretical framework that, through its application, will lead to further progress in discovering the processes and conditions that shape the course of human development” (Bronfenbrenner, 1994, p. 1647).

A fundamental premise of the ecological model is the view that a child’s development occurs within a complex system. Indeed, an ecological perspective has been described as a model, which “focuses on the biological and psychological systems of the individual acting in combination with the social systems of the family, neighbourhood, community, and society” (Garbarino, 1982, p. 295). Using terminology originally coined by Brim (1975), the ecological model comprises five sub-systems: it is conceived as a nested structure where the
organism (individual) is surrounded by the microsystem, mesosystem, exosystem, and macrosystem. An additional systems parameter, which encompasses time, is called chronosystem. A visual representation of the five sub-systems of the ecological model is presented in Figure 3.2 below (Bronfenbrenner, 1994).

![Figure 3.2. Bronfenbrenner’s Ecological Model](image)

While the main elements of the model remain unchanged when applied to varying populations and behaviours, the specifics within each element will vary depending on the population and behaviour being researched (Elder et al., 2007). As such, the aforementioned systems will be discussed within the frames of the current research program. The first sub-system in the ecological model is that of the organism, or the individual child. Here, personal factors such as demographic characteristics and personality traits are considered. While suicide is an ultimately individual experience, the suicidal process (and indeed the act) occurs in the context of the child’s relationships, community, society, and culture. Each child
participates in several immediate settings – referred to as microsystems – such as family, peers, and school (Bronfenbrenner, 1977, 1994). As previously demonstrated in Section 3.5, several factors within these microsystems have been implicated as pertinent risk factors to suicide in childhood. The connection and inter-relations between these microsystems are referred to as mesosystems (Bronfenbrenner, 1977, 1994). Mesosystems are individual to each child; for example, some children’s parents may be well acquainted with their teachers and involved in school activities, while this may not be the case for other children.

In addition to the clearly discernable, and direct, influences at the organism, microsystem and, mesosystem levels, the child may be influenced or restricted by factors within the boarder sub-systems (Bronfenbrenner, 1977, 1994). The exosystem includes larger social structures, which may not directly affect the child but still exert some influence; for example, media influence, their parents’ workplace and social network, and the neighbourhood-community environment in which the child lives (Bronfenbrenner, 1977, 1994). The macrosystem is the outermost system of the model and refers to the social and cultural context of child’s environment, which could encompass a range of factors; for example, societal attitudes towards suicide, and racism and discrimination. Additionally, chronosystem “encompasses change or consistency over time not only in the characteristics of the person but also the environment in which that person lives” (Bronfenbrenner, 1994, p. 1646).

The ecological perspective has frequently been applied within public health research areas, such as violence prevention and health promotion (Krug et al., 2002). However its application within suicidology has been limited. Existing literature pertaining to suicide in adolescents and young adults aged 15 to 24 years old has previously been examined within an ecological framework by Henry and colleagues (1993), who focussed primarily on the microsystem level. They noted that “the human ecological model seems to hold considerable
potential for conducting research and public policy analysis relating to suicidal adolescents and their families” (Henry et al., 1993, p. 305). More recently, Jackson and Nuttall (2001) applied the ecological model in a study examining non-fatal behaviour only (i.e., ideation, threats, and attempts) in children aged 5-12 years.

Using extant research and the authors’ clinical observations, Jackson and Nuttall (2001) identified various risk and protective factors within six domains intended to illustrate the micro-, meso-, exo- and macro-systems of the ecological model. The six domains were: child risk factors (e.g., mental health and behavioural problems, concept of death), child protective factors (e.g., younger age), childhood traumas (e.g., witnessing or experience violence and/or abuse), family stressors (e.g., familial suicidality and psychopathology), family supports (e.g., intact family, socio-economic stability), and social supports (e.g., safe neighbourhood, strong peer and family relationships). In their study, items within the domains of child risk factors, childhood traumas, and family stressors were found to be positively correlated with suicidality as measured by the Pfeffer Spectrum of Suicide Potential Scale (PSSBS; Jackson & Nuttall, 2001).

As maintained throughout this chapter, suicide is a multi-faceted behaviour involving biological, psychological, social, and cultural influences. Contrary to the aforementioned predominant perspectives of suicide, which tend to have “adopted a narrower focus or have failed to build on the growing empirical evidence base” (O’Connor, 2011, p. 182), the ecological model provides a more inclusive approach to the multi-factorial and varied domains implicated in child suicide (see Section 3.5). Arguably, the benefits of the ecological model as a guiding theoretical construct extends beyond offering a useful framework in the understanding of child suicide. The model also has potential for assisting in the identification
of prevention and intervention opportunities at each level, effort, which often requires the cooperation, and participation of the different systems simultaneously (Henry et al., 1993).

3.8 Research Aims

Overall, this thesis aims to advance current understanding of child suicide by elucidating the demographic, psychiatric, and psychosocial factors associated with child suicide. Existing research on suicide in young people has predominately focused on adolescents with little attention having been paid to children specifically. In order to improve current intervention and prevention efforts, an understanding of risk factors of child suicide, which could be used to recognise vulnerable individuals, is required. In addition, the study aims to explore the differences in the grief experience of parents whose children have suicided, compared to those whose children died of other causes of death. These two overarching aims can be further unpacked into five specific aims, presented individually below, along with a brief rationale of their inclusion. Each aim was formulated in light of the literature presented.

3.8.1 Aim 1

*Assess the demographic factors associated with child (10-14 years) and adolescent suicide (15-17 years), compared to children and adolescents who have died by other external causes of death in Queensland.*

Among children younger than 15 years, suicide is a leading cause of death worldwide (Apter et al., 2009). Despite growing interest regarding adolescent and young adult suicide, few contemporary researchers have focussed specifically on children (Pompili et al., 2005). As a consequence, knowledge regarding predictive factors associated with child suicide is limited. The inclusion of a comparison group (that is children who die by other external
causes) allows for the exploration of factors associated with children who ultimately die by suicide, compared to children who die by other causes (Berman et al., 2006).

### 3.8.2 Aim 2

_Compare the demographic, psychosocial, and psychiatric factors between child suicide (10-14 years) and adolescent suicide (15-19 years) in Queensland._

Previous research has predominately focused on adolescents’ aged 15 years or older or grouped children and adolescents together in analysis and discussion (Tishler et al., 2007). Do children and adolescents display similar or different risk factors? Given that little research has been derived from children specifically, it is currently unknown to what extent findings derived from other age groups are applicable to children. Arguably, children and adolescents warrant separate consideration, as they differ in terms of physical, sexual, cognitive, and social development (Grøholt, et al., 1998; Sarkar et al., 2010). A fundamental objective of this thesis was to demonstrate the importance of examining children separately to adolescents in suicide research by delineating the differences between children who die by suicide, compared to their older counterparts. This knowledge gap has important scientific and clinical implications as it has hindered the understanding of child suicide and the development of targeted suicide prevention.

### 3.8.3 Aim 3

_Compare current suicide rates of Aboriginal and Torres Islander and other Australian children (aged 10-14 years) in Queensland._

The profile of child suicide in Queensland presented in Section 2.3 showed that of the 70 suicide deaths of children occurring in Queensland between 1990 and 2010, 35.7% (25
suicides) were of children who identified as Aboriginal and/or Torres Strait Islander. The calculation of rates of suicide among children aged 10-14 years in Queensland will enable a greater understanding of the risk of suicide within Queensland’s population of Indigenous children. The information derived from this aim also serves to justify further investigation of suicide in this sub-group and is directly related to Aim 4.

3.8.4 Aim 4

*Compare the demographic, psychosocial, and psychiatric factors between Aboriginal and Torres Strait Islander child suicide and other Australian child suicide in Queensland.*

Suicide rates are higher in Australia’s Indigenous population across the lifespan (De Leo et al., 2011). This is particularly the case among children. The rate of suicide in Indigenous children was recently found to be almost 10-times higher than among non-Indigenous Australian children (De Leo et al., 2011). This clearly highlights the vulnerability of this group and demonstrates the need to further our understanding regarding suicide in Indigenous children. Indeed, suicide among Indigenous young people was recognised as a priority in the National Aboriginal and Torres Strait Islander Suicide Prevention Strategy (Department of Health and Ageing, 2013).

3.8.5 Aim 5

*Assess, on an idiographic level, the demographic, psychosocial, and psychiatric factors associated with child suicides (10-15 years) in Queensland as compared to a comparison group of children (10-15 years) who have died by other external causes of death in the same timeframe. Construct pathways to suicide in children using life charts in order to analyse similarities and differences in suicidal processes.*
Suicide is a complex, multi-faceted phenomenon influenced by psychiatric, psychosocial, and environmental variables (De Leo, 2002). Previous research has been criticised for its almost exclusively psychiatric focus (Pouliot & De Leo, 2006; Hjelemand et al., 2012). Information derived in relation to this research aim will include a range of psychosocial and psychiatric factors, including, individual and family psychiatric histories, previous communication of suicidal ideation, and exposure to suicidal behaviour. This will allow a comprehensive picture of the child’s life to emerge. In addition, gathering this level of information about children who died by other external causes will allow for comparison across the range of variables. Fulfilling this aim will contextualise the findings of the quantitative studies of this research program (Aims 1 - 4) at a more idiographic level. This will allow deeper understanding of child suicide through assessment of additional psychosocial and psychiatric factors. Additionally, the construction of pathways to suicide in children using life charts will allow similarities and differences in suicidal processes to be explored (Fortune et al., 2007).

3.8.5 **Aim 6**

*Explore the grief experience of parents bereaved by child suicide compared to parents bereaved by other external causes of death.*

Suicide does not end with the suicidal act itself – the effects extend to those left behind (Bartik et al., 2013; Cerel et al., 2008). Compared to other forms of bereavement, research suggests there are many additional deleterious ramifications from the suicide of a loved one (Cvinar, 2005; Dunne & Dunne-Maxim, 2003; Jordan, 2001; McMenany et al., 2008). In addition to mode of death, kinship type, has been suggested to influence bereavement outcomes (Schneider et al., 2011), with the grief following loss of a child
viewed as particularly difficult (Maple, 2005; Stroebe et al., 1993; Wheeler, 1994). This aim provides a platform for participating parents to share their stories of loss.

3.9 Chapter Summary

This chapter discussed the definitional issues in the context of children including the core characteristic of intent, and its relation to children’s development and concept of death. This chapter also served to provide a comprehensive and critical review of the existing literature pertaining to suicide during childhood. Collectively, these studies demonstrated the multifaceted nature of suicide in children. Bronfenbrenner’s ecological model, which guides this research program, was also introduced as a workable and coherent framework for the individual, environmental, and social system factors demonstrated to be associated with child suicide within the systematic review. Finally, the six specific aims of this research program were delineated and a rationale for each was provided. These aims will be achieved through three components, which for clarity will be discussed individually in Sections 4.1.2, 4.1.3 and 4.2.
Chapter 4

Methodological Framework

The previous chapter provided the theoretical grounding for this particular program of research and highlighted areas warranting further research, with the goal of contributing to the understanding of factors related to child suicide. Unlike research into other complex human behaviours, an obvious impediment in suicide research is that the motivation for the act cannot be directly ascertained from the person who suicided (Leenaar, 2002a; McIntosh, 2002). Mortality data and by-proxy interviews are possible solutions for this problem. Both of these alternative sources of information about individuals who have died by suicide have their own limitations but, when employed proficiently, also have their own strengths.

This thesis was derived from the Australian Research Council (ARC) Linkage Project (LP0990918). The original ARC research proposal by the Australian Institute for Suicide Research and Prevention (AISRAP) has been partly adapted. To achieve the aims stipulated in Section 3.8 of the previous chapter, the methodological approach incorporated three components framed within the context of previously highlighted knowledge gaps and what was considered appropriate for the participants included in the study. Section 4.1 introduces the use of mortality data within suicide research and discusses the limitations commonly associated with this data. Specifically, the two databases analysed in the frames of Components One and Two of this thesis, the Child Death Register (CDR) and the Queensland Suicide Register (QSR) respectively are described. These two components used a quantitative analytical approach, which will also be outlined. It is pertinent to note here that additional methodological information such as delineation of variables will be presented later along with the results of these quantitative components, in Chapters Five and Six. This is due to these two components occasioning publication.
The third component of this thesis applied a psychological autopsy (PA) approach. Section 4.2 introduces this research technique within the frame of suicidology and the approach of this thesis. Specifically, methodological considerations regarding the application of the PA method within the study of child suicide will be provided. The implications of participation in proxy interviews by bereaved parents and the potential ethical issues will then be considered. The information derived from proxy interviews with parents was utilised in two ways: 1.) to contextualise the findings of the quantitative studies at more idiographic level, and 2.) to explore parent’s grief experience as a result of their child’s death. This chapter will also discuss the division of Component Three into these two parts and summarise the analytical approach for both. Finally, this chapter will conclude with an ethics clearance statement. The methodological framework for this thesis is diagrammatically presented in Figure 4.1
Figure 4.1. Methodological framework of this program of research
4.1 Mortality Data

The use of official statistics has historical centrality within suicidology. Popularised since Émile Durkheim’s ecological work and publication of *Le Suicide* (1897/1951), the analysis of suicide data as a primary method is valorised by contemporary researchers (Fitzpatrick, 2011; McIntosh, 2002). However, the accuracy of official statistics has been contested. In Section 2.2, the issue of possible misclassification and under-estimation of suicide statistics in the context of children was discussed.

Issues specifically raised around inaccuracy included: differing classification systems, hesitation in classifying a death as suicide due to associated stigma, biases arising from beliefs and attitudes around children’s perceived ability to participate in suicidal behaviour, as well as the misinterpretation of suicides as accidents. Definitional issues in the operationalization of suicide and lack of widespread acceptance and utilisation of a definition, discussed in Section 3.1, may also contribute to misclassification of deaths and subsequent mortality data in general; this point is likely exacerbated with suicides involving children.

In Australia, when a suicide occurs, the death is required to be reported to the coroner who then investigates them. Reportable deaths were discussed in Section 2.2.1 of Chapter 2. Official suicide statistics are based on the cause and circumstances of the death determined by the investigation undertaken by the Coroners (De Leo, et al., 2010; De Leo et al., 2013). For a death to be classified as a suicide, and thus recorded as such in official statistics, available evidence must clearly indicate that the death was “self-determined or due to self-inflicted injuries” (De Leo et al., 2013, p. 17).
Each case of possible suicide (defined in the next section) in the QSR is re-examined using the AISRAP-developed ‘Suicide Classification Flow Chart’ (De Leo et al., 2013, Appendix 4.1; see Section 4.1.1 for more detail). Currently a modified version of AISRAP’s suicide classification flow chart is utilised by the Child Death Review Team of the Commission for Children and Young People and Child Guardian (CCYP CG) when assessing child deaths included in the CDR. The method of assessment used within the QSR (and subsequently the CDR) is based on health research criteria rather than simply the Coronial findings utilised by other data bodies such as the ABS. Arguably, this method may lead to a lower threshold for classifying a death as a suicide (De Leo et al., 2013). Therefore, the QSR and the CDR are invaluable assessment sources for suicide across the lifespan but particularly in cases involving children due to the possibility of misclassification as discussed in Section 2.2.

Another methodological limitation of official statistics with respect to suicide research is that many variables of specific interest – such as psychosocial and psychiatric factors – are not collected (McIntosh, 2002). Therefore, the ability to understand ‘why’ an individual has taken his or her own life is often limited to the more routinely collected demographic information that is quantifiable by nature (Hjelmeland & Knizek, 2010; McIntosh, 2002; Reid, 1960). The data sources used for the current program of research, and presented in Chapters Five and Six, are the CDR and the QSR, respectively. These databases contain a wide range of demographic, psychosocial, psychiatric, medical, contextual, and behavioural aspects of suicide cases of children (CCYP CG, 2014; De Leo et al., 2013). By providing information in addition to demographics routinely collected, these databases are invaluable sources and minimise the limitations inherent to other mortality databases used in quantitative suicide research.
4.1.1 Suicide Classification Model

In the QSR, and subsequently the CDR, cases of potential suicide are evaluated and classified into three levels: ‘Beyond Reasonable Doubt’ (BRD), ‘Probable’, or ‘Possible’ (De Leo et al., 2013). For cases to be classified as BRD, available evidence must indicate the presence of one or more of the following significant factors: witness/es to the actual suicide incident; an oral or written statement of intent; or a ruling by coronial investigation that the death is a suicide. In contrast, ‘probable’ cases lack sufficient evidence to definitively conclude the death as ‘suicide’, yet the cause of death is more consistent with a death by suicide than by any other cause. Further, cases classified as ‘possible’ are suspected to be suicides (as indicated by Police on the Form 1) but, due to insufficient evidence, there is considerable possibility that the death may be due to another cause or is of undetermined intent (De Leo et al., 2013). Cases classified as ‘possible’ within the QSR and CDR were not included in this analysis.

4.1.2 Child Death Register (CDR): Component One

The first component of this thesis involved a Queensland population-based study using data derived from the CDR. Using external causes of deaths occurring during the period 2004-2012, a case-control study design was applied. Cases were suicides of children (10-14 years) and adolescents (15-17 years); controls were other external causes of death in the same age bands. Component One addresses Aims 1 and 2, as specified in Section 3.8.1:

1. Assess the demographic factors associated with child (10-14 years) and adolescent suicide (15-17 years), compared to children and adolescents who have died by other external causes of death in Queensland.
2. Compare the demographic, psychosocial, and psychiatric factors between child suicide (10-14 years) and adolescent suicide (15-19 years) in Queensland.

4.1.2.1 Database

The CDR is a comprehensive register of all deaths of children and young people (younger than 18 years) occurring in Queensland. During the course of this study, this database was maintained by the CCYPCG, which has a state-legislated function relating to the deaths of children residing in Queensland. This includes conducting broad research in relation to child mortality and formulating recommendations directed at reducing death in childhood (CCYPCG, 2014). Data is collected from the Register of Births, Deaths, and Marriages, as well as the deaths reported to the Office of the State Coroner (CCYPCG, 2014). This data is also supplemented by data from additional sources, such as the Department of Communities, Child Safety and Disability Services, Queensland Health and Department of Education, Training, and Employment (CCYPCG, 2014).

4.1.2.2 Analytical approach

Data contained within the CDR is available to genuine researchers for the purposes of research aimed at reducing and improving understanding of child-related deaths. An application to access and use data from the CDR for this program of research was made in October 2011. Approval was granted and de-identified data of deaths occurring between 2005 and 2009 was released at the end of November 2011. In November 2012, updated de-identified data (deaths occurring between 2004 and 2012) became available and was released in December 2012.

Data of all external causes of death of children and young people were provided in predominately text and number format in Excel software. As such, a coding schedule for all
variables was required to be constructed. Data were then reformatted into numeric format in order to be compatible with IBM SPSS Statistics 21. All subsequent analyses were performed in IBM SPSS Statistics 21. Basic descriptive analyses were followed by multivariate logistic regression in order to analyse differences in demographic, psychosocial, and psychiatric factors. Specifically, categorical data was analysed using the non-parametric technique Chi-Square ($\chi^2$) tests for independence. Effect size was measured using Odds Ratios (OR) and 95% confidence intervals (95%CI) were also reported (Szumilas, 2010). A binary logistic regression was performed to examine the independent contribution of significant variables from analysis comparing child and adolescent suicide. Significant variables were entered in a backward stepwise logistic regression. A probability level of 0.05 was considered significant.

4.1.3 Queensland Suicide Register (QSR): Component Two

The second component of this thesis involved a Queensland population-based study using data derived from the QSR. A comparison of suicides in Indigenous children (10-14 years) and suicides of other Australian children in the same age band occurring during the period of 2000-2010 was conducted. As discussed in Section 2.3, suicide rates are higher in Queensland’s Indigenous child population. Component Two addresses Aims 3 and 4, as specified in Section 3.8.1:

3. Compare current suicide rates of Aboriginal and Torres Islander and other Australian children (aged 10-14 years) in Queensland.

4. Compare the demographic, psychosocial, and psychiatric factors between Aboriginal and Torres Strait Islander child suicide and other Australian child suicide in Queensland.
4.1.3.1 Database

The QSR is a Queensland Mental Health Commission (QHMC) funded suicide mortality database maintained by AISRAP since 1990 (De Leo, 2010). Queensland is presently the only state to have an independent database containing all suicides, including those of children (Williams et al., 2010). The QSR includes information on a wide range of demographic, psychosocial, psychiatric, medical, contextual, and behavioural aspects of suicide death cases reports (De Leo et al., 2013). Data within the QSR are predominately supplied to AISRAP by the Office of State Coroners and includes information derived from police reports, post mortem, and toxicology reports (De Leo et al., 2013). The data are also cross-referenced with data available on the National Coronial Information System (NCIS) (De Leo, 2007). In addition, the QSR contains next-of-kin contact details at time of death, along with permission to be contacted by AISRAP for research purposes. The role of the QSR in the recruitment for Component Three will be discussed in Section 7.2.4.1 of Chapter Seven.

Ethnicity within the QSR is recorded as Caucasian, Aboriginal/Torres Strait Islander, Asian, and other or unknown. The QSR does not distinguish between Aboriginal or Torres Strait Islander ethnicity and, as such, the term ‘Indigenous’ is used to define individuals of Aboriginal or Torres Strait Islander descent within Component Two. Prior to 1994, the percentage of cases without stipulation of an individual’s ethnicity was 42.9%; when questions pertaining to ethnicity were added to forms used during death investigations, this percentage decreased substantially to 13.1% (between 1994 to 2000) and dropped to an average of 0.7% after 2001 (De Leo et al., 2011). As can be seen, the identification of ethnicity has improved considerably within the QSR. Since the variation in the percentage of
cases with unknown ethnicity was minimal after 2001, the time period 2000 to 2010 was deemed most appropriate for inclusion in the analysis.

4.1.3.2 Analytical approach

In order to compare suicide rates in different groups, Rate Ratios (RR) with 95% CIs were calculated. Population data used to calculate suicide rates by Aboriginal and Torres Islander status were obtained from the *Population Characteristics, Aboriginal and Torres Strait Islander Australians, 2006*, published by the Australian Bureau of Statistics (ABS) (ABS, 2010). Population data used to calculate suicide rates by Accessibility Remoteness Indexes for Areas (ARIA+) were obtained from the *2006 Census of Population and Housing*, as it includes population numbers by geographical remoteness (ABS, 2006).

Data analysis was performed in IBM SPSS Statistics 21. As in Component One, categorical data was analysed using the non-parametric technique Chi-Square ($\chi^2$) tests for independence. Effect size was measured using Odds Ratios (OR) and 95% confidence intervals (95%CI) were also reported (Szumilas, 2010). A probability level of 0.05 was considered significant.

4.2 Interviews by Proxy

Proxy data is routinely obtained through PA interviews. The PA method was originally developed by Shneidman (Shneidman & Farberow, 1957) to assist medical examiners and coroners in ascertaining the *intentions* of the decedent regarding their actions (that is, whether death was the expected and desired outcome and, therefore, a suicide). Since its conception, it has been applied by researchers to explore *why* a decedent suicided (Pouliot & De Leo, 2006; Shneidman, 2004). In this regard, the PA has been used to help identify predictive factors for suicide (Cavanagh, Carson, Sharpe, & Lawrie, 2003; Hawton et al.,
2003; Velting et al., 1998) that are ultimately used in suicide prevention recommendations (Knoll, 2008).

The PA method typically involves interviewing individuals who knew the decedent well, such as parents and siblings (Beskow, Runeson, & Åsgård, 1990; Velting, et al., 1998). These interviews can be supplemented by additional information, such as coroner’s reports, medical records, social documents (journal writings or internet correspondence), and legal documents (Knoll, 2008). Hawton and colleagues (1998) maintain that the most pertinent information is derived from interviews with informants. The overall purpose of the collaborating evidence is to attempt to reconstruct the psychological and physiological health, and social circumstances (including adversity and integration), of the person before their suicide (Cavanagh et al., 2003; Shneidman, 2004).

A review of PA studies conducted by Cavanagh and colleagues (2003) suggested that individuals with psychiatric disorders were more likely to engage in suicidal behaviour with disorders present in between 88% and 95% of suicides. However, as pointed out by Pouliot and De Leo (2006), the PA technique is routinely conducted within a medical model paradigm, which fails to adequately consider that while “psychopathology is a contributory cause of suicide [it is] not a sufficient one” (p. 492). Moreover, the majority individuals who experience mental health difficulties do not take their own lives and, analogously, individuals without mental health difficulties sometimes do (Pouliot & De Leo, 2006).

The validity and reliability of the PA technique has been previously discussed (e.g., Beskow et al., 1990; Hawton et al., 1998; Pouliot & De Leo, 2006). Recently, Hjelmeland and colleagues (2012) challenged the extent to which proxies can accurately answer questions about their loved ones, particularly those of a diagnostic nature. The authors argued: “certainly family members or friends might have opinions about such issues, but do such
subjective opinions necessarily represent how the deceased felt?” (Hjelmeland, Dieserud, Dyregrov, Knizek, & Leenaars, 2012, p. 614).

Information derived from proxy interviews may be susceptible to several informant-related biases, including: the social characteristics and mental health of informants, kinship type and quality of relationship, informant attitudes about suicide, circumstances of how the informant learnt of their loved ones death, and the influence that the passing of time can have on informant recall and meaning reconstruction (Hjelmeland et al., 2012; Pouliot & De Leo, 2006). There is also the potential for bias given the fact that the interviews are framed within an informants’ emotional loss of a loved one (Hjelmeland et al., 2012; Pouliot & De Leo, 2006). Information derived through the PA method may also be open to interviewer-related biases, including: the psychological and social characteristics of the interviewer, an interviewer’s own perceptions, and their training in conducting PA interviews (Hjelmeland et al., 2012; Pouliot & De Leo, 2006).

Despite the limitations and criticisms against the PA studies over the years, Pouliot and De Leo (2006) stated: “notwithstanding its limits, the approach offers the opportunity to obtain extended information on various domains linked to suicidal behaviour…out of reach in most epidemiological studies” (p. 491). The methodological considerations in the application of the PA technique within the context of this thesis are further discussed in Section 4.2.1.1.

4.2.1 Psychological Autopsy: Component Three

The third component of this thesis involved conducting PA interviews with parents whose child died by suicide or other external causes of death before their 16th birthday. The information obtained through these interviews can be divided into two sub-components. The
two sub-components of Component Three address Aims 5 and 6, as specified in Section 3.8.1 of the previous chapter:

5. Assess, on an idiographic level, the demographic, psychosocial, and psychiatric factors associated with child suicides (10-15 years) in Queensland compared to a control group of children (10-15 years) who have died by other external causes of death in the same timeframe. Construct pathways to suicide in children using life charts in order to explore similarities and differences in suicidal processes.

6. Explore the grief experience of parents bereaved by child suicide compared to parents bereaved by other external causes of death.

The systematic literature review presented in Section 3.5 demonstrated that relatively few studies have employed the PA method in child samples. The PA method has been previously been used in studies involving child suicides in the US (Brent et al., 1999; Shaffer et al., 1996), Finland (Marttunen et al., 1991), Norway (Freuchen & Grøholt, 2013; Freuchen et al., 2012a, 2012b), and Hong Kong (Lau, 1994). Other extant research on suicide in children has been restricted to information obtained from retrospective record reviews (e.g., coronial) due to the inaccessibility of valuable sources of information (Dudley et al., 1998; Werenko et al., 2000), such as interviews with parents.

4.2.1.1 Methodological considerations

Previous studies employing the PA method have been criticised for their methodological weaknesses, such as the use of non-validated assessment measures (Ang, Chia, & Fung, 2006; Renaud, Berlim, McGirr, Tousignant, & Turecki, 2008; Shafii, et al., 1988), which may be inappropriate for administration to proxies (Pouliot & De Leo, 2006). Research using the PA method has also been criticised for its almost exclusively psychiatric
focus (Pouliot & De Leo, 2006; Hjelmand et al., 2012). This thesis has aimed to assuage these methodological constraints by using validated child assessment measures designed to be administered to parents; these include measures pertaining to the psychiatric, psychosocial, and environmental factors (Knoll, 2008).

Prior research suggests that parents may underestimate the prevalence and severity of psychiatric disorders in their children (Velting, et al., 1998). Indeed, parents may be inclined to withhold information that they perceive would shed a negative light on their child, their family, or indeed themselves (Hawton et al., 1998; Hjelemand et al., 2012). The current study supplements and cross-references the information obtained during the PA interview with parents with information derived from the CDR and QSR. The CDR and QSR, and the information contained within these databases, were discussed in Sections 4.1.2.1 and 4.1.3.1 respectively. In addition, consultation with a panel of psychiatrists was undertaken to determine the existence of psychological difficulties. Specifically, mental health difficulties preliminarily identified during the PA interview were discussed in-depth with the panel and within the context of the child’s family, social, and educational life to determine if the identified issue was normative rather than pathological. This was performed to lend further credibility in the determination of psychiatric diagnosis (if any).

The inclusion of a comparison group is desirable and the selection and appropriateness are ultimately driven by research aims of the study (Hawton, et al., 1998; Isometsä, 2001). The comparison group for the current study needed to contain children who had died by other causes besides suicide for two reasons. First, a comparison group of children who had died by other external causes of death would allow for some estimate of the relative role of identified suicide risk factors (Conner et al., 2011; Isometsä, 2001; Pouliot & De Leo, 2006). In this way, the use of ‘other external causes of deaths’ as a comparison group
would also allow for the exploration of factors associated with children who ultimately died by suicide compared to children who died by other causes (Berman et al., 2006). Second, in order to explore differences in parental bereavement, the grief experience of parents whose children had died by other causes was required (Hawton, et al., 1998).

The retrospective nature of the PA method, and the potentially confounding influence of the passing of time on the reliability and validity of participant recall, has also been highlighted (Brent et al., 1988; Hjelmeland et al., 2012; Pouliot & De Leo, 2006). The inclusion of the comparison group from the same period of time could minimise this potential confounding factor. Furthermore, the temporal interval between death and interview also influences the inclination of bereaved relatives to participate (Cooper, 1999). As discussed previously in Section 3.6, differences in bereavement have generally been quantitatively assessed during the early stages of grief; however, Jordan (2001) suggests differences may not emerge until later or only through qualitative means.

Previous research has also been criticised due to the lack of transparency regarding interviewer training (Pouliot & De Leo, 2006). The researcher’s training for the current study began by accompanying an experienced PA interviewer to observe an interview for another project. The next stage of training involved interviewing a participant as the trainer recorded answers. This was done to allow the author time to become familiar with the interview schedule in a practical setting and gain experience conducting a PA interview. In addition to ongoing training, clinical interviewers, including the researcher, have access to a comprehensive, practically-orientated training manual covering the PA method in its entirety (i.e., recruitment to completion of interviews; AISRAP, n.d.).
4.2.1.2 Ethical considerations

One ethical concern is the emotional demands that may be placed on the participant due to the sensitive nature of the topic and any subsequent potential distress (Cooper, 1999; Wong, et al., 2010). Whilst this potential is acknowledged, similar interviews that have taken place in Australian and international research suggests that that people may not feel distress or are able to cope with the emotions brought up during the interview (Beskow, Runeson, & Åsgård, 1991; Wong, et al., 2010). Furthermore, there is a growing body of empirical research suggesting that the experiences of participants within suicide research are generally beneficial and positive (Dyregrov et al., 2011; Hawton et al., 2003; Henry & Greenfield, 2009). A PA interview allows an opportunity for individuals to share their story in a nonjudgmental and supportive environment (Shneidman, 2004). Suicide informants reported in extant literature that participation allowed them the opportunity to explore and find meaning in the suicide, gain acceptance of the loss, as well as the opportunity to find personal meaning through their altruistic participation with the hope of helping others (Beskow et al., 1991; Henry & Greenfield, 2009; Wong, et al., 2010).

Wong and colleagues (2010) extended on previous knowledge regarding informant participation experiences by investigating the experiences of informants for comparison groups. Such illumination of comparison group experiences is of scientific importance as the ethical implementation of a case-comparison PA approach was used in the current research program and is common in suicide research. The results of this study suggested that, similar to suicide case informants, case-comparison informants did not have any unreasonably detrimental effects and, overall, judged the experiences to be beneficial and positive (Wong, et al., 2010). Notwithstanding this, it was intended that interviews in the current study would be stopped if either the participant or the interviewer felt it had become too distressing for the
participant. Interviews would only then be continued if both the participant and the interviewer felt capable of doing so.

Appropriate recruitment methods of potential informants for PA interviews have been discussed (Beskow et al., 1991; Hawton, Houston, Malmbergand, & Simkin, 2003). Various methods of recruitment have been employed in previous PA studies, including: telephone contact followed by a letter; face-to-face initial contact; and, initial contact via a letter followed by telephone contact (Beskow et al., 1991). The latter method is employed in the current study (recruitment procedures will be discussed in more detail in Section 7.2.4.1). This recruitment method has been argued to be the most ethical and appropriate, allowing potential participants adequate time to consider their decision to participate (Hawton et al., 2003). A report by Cooper (1999) described several methodological and ethical issues in a PA study encountered by the authors. One potential study participant, who declined to participate, commented that letters sent should be personalised to the individual receiving them. As a result, personalisation of the letters was incorporated in the current study wherever appropriate; for example, ‘your son’, ‘daughter’, and specific names of the child and parent.

4.2.1.3 Analytical approach

A semi-structured format using validated psychological scales/questionnaires was applied in the PA interview. Parents were encouraged to speak freely when they felt compelled to do so. A structured or semi-structured approach has been suggested as the most appropriate when conducting these types of interviews in order to permit an acceptable level of validity and reliability (Barriball & While, 1994; Knoll, 2008; Werlang & Botega, 2003). The specific measures used to explore the psychiatric, psychosocial, and environmental variables to child suicide, along with their psychometric properties, are discussed in more
The GEQ consists of 55 items designed to measure different aspects of grief, including several aspects that have been associated with suicide bereavement, such as stigma, loss of support, search for ‘why’, and guilt (Bailey, Dunham, & Kral, 2000). The questions are designed to assess eleven components of grief: somatic (items 1-5); general grief (items 6-10); search for explanation (items 11-15); loss of support (items 16-20); stigma (items 21-25); guilt (items 26-30); responsibility (items 31-35); shame (items 36-40); rejection (items 41-45); self-destructiveness (items 46-50); and, unique reactions (items 51-55) (Barrett & Scott, 1989). The GEQ has been demonstrated to empirically differentiate between suicide and other forms of bereavement, including accidental deaths (Bailey et al., 1999; Barrett & Scott, 1989). Barrett and Scott (1989) found the GEQ possessed excellent internal consistency as measured by Cronbach’s alpha (α = .97). Furthermore, the majority of subscales demonstrated moderate to high internal consistency (α = .76 - .89), with the exceptions of general grief and search for explanation (Barrett & Scott, 1989). Overall, the GEQ appears to be a multidimensional measure of grief phenomenology (Bailey et al., 2000).

Each measure included in the interview schedule is relatively well-known and both the validity and reliability of each measure have been demonstrated in previous studies (Achenbach & Rescorla, 2001; Nakamura, Ebesutani, Bernstein, & Chorpita, 2009; Sheehan, et al., 2010; Tang et al., 2010; Williamson, et. al., 2003). As previously mentioned, the information derived from proxy interviews with parents was utilised in two ways (see Section 4.2.1). In order to contextualise the findings of the quantitative studies at a more idiographic level, a case study approach was applied. Thematic analysis was used to explore parental
grief experience as a result of their child’s death. The PA component of this thesis used a mixed-methods approach. These analytical approaches are discussed in more detail below.

4.2.1.3.1 Case Studies

Case studies can be defined as “analyses of persons, events, decisions, periods, projects, policies, institutions or other systems which are studied holistically by one or more methods… the case illuminates and explicates” (Thomas, 2011, p. 513). Stake (2000) offers that a “case study is not a methodological choice but a choice of what is to be studied. By whatever methods we choose to study the case” (p. 435; emphasis author’s own). While case studies are "one of the most common ways to do qualitative inquiry" (Stake, 2000, p. 435), case studies are not fundamentally qualitative (Stake, 2000), and can even be limited to quantitative evidence (Yin, 2003).

This research strategy has not escaped criticism. Two common reasons for the disapprobation of case studies stem from its seemingly apparent lack of rigour and inability for generalisation (Yin, 2003). However, Yin (2003) and Leenaars (2002a) concede that potential bias is also present in experimental research and is required to be considered and mitigated during the research process. Diminished ability to generalise the PA component is accepted here and, as stipulated in Section 1.6, this thesis does not purport to generalise the findings stemming from the PA component to all suicides of Australian children. Instead, the aim is to contextualise the quantitative findings of Component One and Two on an individual level. The case studies of each child who died by suicide serve to illustrate the ways the risk factors plausibly influenced the suicidal processes of children.

In order to follow the life stories and suicidal process among children, life charts were constructed for each case. Life charts are an illustrative tool depicting the temporal
relationship of biological and psychosocial events and behaviours in a person’s life (Sharpe, 1992). The visual representation facilitates the understanding of the suicidal process in children as life stories and key events of individuals can be followed in a developmental context across an, albeit short, life trajectory (Fortune et al., 2007). The construction of life charts has previously been used effectively in England to analyse suicide cases among adolescents and young adults (Fortune et al., 2007).

4.2.1.3.2 Thematic Analysis

In addition to the PA interviews being about their child’s life and death, parents’ personal experiences since the loss of their child were also explored. Specifically, parental bereavement was explored using the questions contained within the GEQ as probing questions. In addition, during the course of the PA interview, there were times where the parent spoke outside the structure of the tools to elaborate more about their experience regarding the life of their child and their personal grief experiences.

Thematic analysis (Braun & Clarke, 2006) was used to compare the grief experiences of parents whose children died by suicide with parents whose child died by other external causes. Data management and coding was conducted in NVivo (Version 10; QSR, 2011). Several steps were involved:

1. Transcription. Audio files of interviews were transcribed by a professional transcription service, Pacific Transcripts. Transcripts were compatible with NVivo (Version 10; QSR, 2011);
2. Data familiarization through initial reading (and re-reading) of transcripts;
3. Preliminary code identification;
4. Analysis of code into overarching themes; and,
5. Deliberation on defining and naming themes.

Guest, Bunce and Johnson (2006) posit that data saturation can be attained in 6-12 interviews. Data saturation occurs when no novel or relevant information is discernable within the data (Guest et al., 2006). In order to achieve such saturation: interviews must be reasonably structured; participants must have experienced a similar reality (e.g., parental bereavement of child aged between 10 and 15 years); the area of inquiry needs to be explicit (e.g., grief experience); and, the research must aim to provide exploratory, overarching themes. As a way to ensure anonymity of the children and relatives whilst maintaining the authentic voices of parents’, the analyses of data derived from the PA interviews is “presented in such a way that respondents should be able to recognise themselves, while the reader should not be able to identify them” (Barnes, 1979, p. 39).

4.3 Ethics Statement

Full ethical clearance was obtained on the 24th May 2011 (GU Protocol Number CSR/01/11/HREC, see Appendix 4.2). Several amendments were made but these were predominately about structural and formatting changes made to information sheets and letters to participants. Data from the CDR is available to genuine researchers for the purposes of research aimed at reducing and improving understanding of child-related deaths. An application to access and use data from the CDR for the current research program was made on October 17th 2011 and approval was granted and data released at the end of November 2011 and November 2012.

4.4 Chapter Summary

This chapter has presented the rationale for methodological framework used within this study. Overall, this study aims to advance the current understanding of child suicide by
elucidating the specific pathways to child suicide and the demographic, psychiatric, and psychosocial factors associated with child suicide. An additional aim of the study is to explore differences in the grieving process of parent bereaved by suicide. In order to achieve these aims, this study comprises of three components and employs both quantitative and qualitative methodologies (refer to Figure 4.1 above). Further description of pertinent methodological information will be discussed in later chapters.
Chapter 5

Study Component One: Factors Related to Childhood Suicides (Paper 2)

5.1 Notes

This chapter is reproduced from the paper ‘Factors associated with suicide in QLD children and adolescents: Analyses of QLD Child Death Register’. The PhD Candidate is the first author on this published paper. The second and third authors are the principal and associate supervisor of the candidate respectively. K. Kõlves and D. De Leo contributed to the conceptualization of the study. R. Soole was responsible for the data analysis and supervised during this process by K. Kõlves. R. Soole drafted the manuscript and K. Kolves contributed to the writing of the manuscript. D. De Leo revised the final manuscript critically for important intellectual content. All authors read and approved the final manuscript.

This paper was published in Crisis: The Journal of Crisis Intervention and Suicide Prevention. Crisis has an Impact Factor of 1.762. The copyright specifications of this journal permit the inclusion of this paper within this dissertation.


5.2 Overview and Contribution of Paper to Research Aims

The aim of this quantitative study was to identify the demographic, psychosocial, and psychiatric factors associated with child suicides. This paper assesses the demographic factors associated with child (10-14 years) and adolescent suicide (15-17 years), compared to
children and adolescents who have died by other external causes of death in Queensland. In addition, this paper compares the demographic, psychosocial, and psychiatric factors between child suicide (10-14 years) and adolescent suicide (15-19 years) in Queensland. Specifically, this paper addresses Aim 1 and Aim 2 provided in Section 3.8.1.

This paper applied a case-control design using external causes of deaths recorded in the Queensland Child Death Register. Cases were suicides of children (10-14 years) and adolescents (15-17 years); controls were other external causes of death in the same age band.

5.3 Introduction

Traditional social narrative generally presumes that childhood is associated with joy. Child death by suicide presents a confronting paradox to this assumption (Kienhorst et al., 1987). Among children younger than 15 years, suicide is a leading cause of death worldwide (Apter, et al., 2009). Existing research has tended to focus on individuals aged 15 years and older, or with studies generally grouping together children and adolescents. Only a few studies have specifically focussed on children younger than 15 years (Beautrais, 2001a; Dervic et al., 2008; Grøholt et al., 1998). Since observations have not been derived from this specific group, it is currently unclear whether existing knowledge about suicide related factors for adolescents and adults is relevant to children.

Children and adolescents might warrant separate consideration. Indeed, they differ in terms of physical, sexual, cognitive, and social development (Grøholt, et al., 1998; Sarkar et al., 2010). Arguably, failure to delineate differences and similarities in suicide-related factors for childhood and adolescence can have scientific and clinical implications, hindering the understanding of child suicide and the development of targeted suicide prevention.

Consequently, the aims of the current study are:
1. to assess demographic factors associated with child (10-14 years) and adolescent suicide (15-17 years) when compared to children and adolescents who have died by other external causes of death; and,
2. to compare demographic, psychosocial, and psychiatric factors between child and adolescent suicide.

5.4 Method

5.4.1 Data source

Data of all external causes of death of children and young people aged 10-17 years occurring during the period 2004-2012 in Queensland were derived from the Queensland Child Death Register (CDR). The CDR is a comprehensive database maintained by the Commission for Children and Young People and Child Guardian (CCYPCG). The database contains information based on death registration data provided from the Registry of Births, Deaths and Marriages, as well as reportable deaths referred to the Office of the State Coroner (CCYPCG, 2012). These data are also supplemented from other government entities, including, but not limited to, the Department of Communities, Child Safety and Disability Services, Department of Education, Training and Employment, and Queensland Health (CCYPCG, 2012).

The current study used a case-control study design. Cases were suicides in children (10-14 years) and adolescents (15-17 years); controls were other external causes of death in the same age bands. Causes of death were categorised using the International Classification of Disease, Tenth Revision (ICD-10) (World Health Organization [WHO], 1992). Specifically, data for this study contain External Causes of Death (Chapter XX of ICD-10) as follows: intentional self-harm (X60-X84); accidental deaths including transport (V01-V99);
other external causes of accidental injury (W00-X59), including drowning and submersion, exposure to smoke, fire and flames; fatal assault (X85-Y09), including neglect; and event[s] of undetermined intent (Y10-Y34). Also included are deaths of ill-defined and unknown cause of mortality (R99). Whilst deaths of ill-defined and unknown cause of mortality (R99) do not fall under the ICD-10 external causes of mortality, for the purposes of this study the ICD-10 subcategories, with the exception of suicide, were combined and hereinafter are referred to as ‘Other External Causes of Death’ (OEC). CDR classifies suicide as ‘Beyond Reasonable Doubt’, ‘Probable’, or ‘Possible/Undetermined’ using a modified ‘Suicide Classification Flow Chart’ developed by the Australian Institute for Suicide Research and Prevention ([AISRAP], CCYPCG, 2012; De Leo et al., 2013). Ethical approval of the study was obtained from Griffith University Human Research Ethics Committee (CSR/01/11/HREC).

5.4.2 Variables

Data available on external causes of deaths (including suicides) were the following gender, place of birth, Aboriginal and Torres Strait Islander status, residency, and whether the individual was known to the child protection system within three years prior to their death. The child’s usual place of residence was used. Geographical remoteness was coded using the Accessibility/Remoteness Index of Australia Plus (ARIA+). The ARIA+ classification provides an interpretation of remoteness in terms of distance travelled by road in order to access services. It has five categories: major cities (classified as ‘metropolitan’ in the analysis), inner regional and outer regional (regional), remote and very remote (remote). Social and economic conditions were coded using the Socio-Economic Indexes for Areas (SEIFA). SEIFA was based on the child’s usual place of residence and reflects the economic and social environment in which they resided. It does not take into account the specific
socioeconomic status of the child or their family. Factors linked to relative advantage in an area include higher familial incomes and a greater proportion of individuals with higher education and employment in high-skilled jobs. The SEIFA has five categories: most and somewhat disadvantaged (referred to as low), neither disadvantaged nor advantaged (moderate), somewhat and most advantaged (high).

Variables available for suicides included: further information regarding diagnosed (or reasonable conjecture of) mental and behavioural disorders, prescribed drugs, history of abuse, and presence of domestic violence. Variables concerning prior suicidality included suicidal ideation, self-harm and suicide attempts. Alcohol consumption at time of death, any expression of explicit or implied statement of suicidal intent, and evidence of exposure to prior suicidal behaviour within the decedent’s family (familial contagion) or peers (imitative contagion) were also examined. Precipitating events six months prior to death included: childhood trauma; bereavement; familial problems; romantic and interpersonal relationship problems; somatic health issues; legal issues; school or work issues (including perceived or real performance difficulties); financial issues; homelessness; and, events of transition (transition from primary to high school, or high school to employment, changing schools, moving interstate or a distance from home, etc.).

5.4.3 Statistical analysis

Data analysis was performed in IBM SPSS Statistics 21. Odds ratios (OR) with 95% confidence intervals (95% CI) were calculated. With small numbers (fewer than 3), Fisher’s exact test was used. Backward stepwise logistic regression was applied to determine the independent contribution of significant variables from analysis comparing child and adolescent suicide. A probability level of 0.05 was considered significant.
5.5 Results

5.5.1 Comparison of suicides and other external causes of deaths

A total of 469 deaths by external causes were recorded for children and adolescents aged 10-17 years in Queensland in the time period between 2004 and 2012. Table 5.1 presents the prevalence of each type of death included in the data for children aged 10-14 years and adolescents aged 15-17 years.

Table 5.1 Number of Child and Adolescent Deaths by Type of Death for Time Period 2004-2012

<table>
<thead>
<tr>
<th>Type of death</th>
<th>Children</th>
<th>Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(10-14 years)</td>
<td>(15-17 years)</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Intentional self-harm (X60-X84)</td>
<td>34</td>
<td>27.2%</td>
</tr>
<tr>
<td>Other external causes of accidental injury (W00-X59)</td>
<td>6</td>
<td>4.8%</td>
</tr>
<tr>
<td>Accidental drowning and submersion (W65-W74)</td>
<td>14</td>
<td>11.2%</td>
</tr>
<tr>
<td>Assault (X85-Y09)</td>
<td>6</td>
<td>4.8%</td>
</tr>
<tr>
<td>Exposure to smoke, fire and flames (X00-X09)</td>
<td>4</td>
<td>3.2%</td>
</tr>
<tr>
<td>Transport accidents (V01-V99)</td>
<td>57</td>
<td>45.6%</td>
</tr>
<tr>
<td>Ill-defined and unknown cause of mortality (R99)</td>
<td>4</td>
<td>3.2%</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100%</td>
</tr>
</tbody>
</table>

Suicide accounted for almost one-third of OEC for children (27.2%) and adolescents (33.4%), and was the second leading cause of death after transport-related fatalities. Overall, the number of suicides increased with age and occurred more frequently within the adolescent group (77.2%), compared to children (22.8%).
Males died by suicide more often than females both in children (61.8%) and adolescents (64.3%; OR=0.90, 95% CI=0.41-1.97). There were no significant gender differences by type of death for children (OR = 1.01, 95% CI = 0.45-2.27), or adolescents (OR = 0.83, 95% CI = 0.52-1.33) (Table 5.2).

Children and adolescents who died by suicide did not differ significantly in terms of place of birth and were predominately born in Australia (93.9% and 91.2% respectively). When compared to other Australian children and adolescents, Aboriginal and Torres Strait Islander children and adolescents were both significantly more likely to die by suicide than by other external causes (OR = 14.47, 95% CI = 4.63-45.20 for children; OR = 2.89, 95% CI = 1.54-5.40 for adolescents; Table 5.2). Considering that almost half (46.9%) of the suicides in children were Aboriginal and Torres Strait Islanders compared to almost a quarter in adolescents (24.8%), Aboriginal and Torres Strait Islanders were significantly more likely to die by suicide at age of 10-14 years (OR = 2.68, 95% CI = 1.18-6.08).

Further, children who lived in remote areas were significantly more likely to die by suicide than OEC, when compared to children who lived in metropolitan areas (OR = 3.46, 95% CI = 1.00-11.99). However, there were no significant SEIFA differences for children or adolescents by type of death (Table 5.2). Children who died by suicide were more likely to be known to the child protection system within three years prior to their death, compared to children and adolescents who died by OEC. This finding did not reach statistical significance for children, but was significant for adolescents (OR = 3.06, 95% CI = 1.80-5.19). In total, 41.2% of children who died by suicide were known to the child protection system, which was slightly lower in adolescents (34.8%), but not significantly so. Siblings of decedents were known to the child protection system more frequently in cases of adolescent suicide when compared to OEC (OR = 3.23, 95% CI = 1.70-6.15), but not in children (Table 5.2).
Table 5.2 Demographic Variables in Children (10-14 years) and Adolescents (15-17 years) Suicides and Other External Causes of Death

<table>
<thead>
<tr>
<th></th>
<th>Children (10-14 years)</th>
<th>Adolescents (15-17 years)</th>
<th>Difference between (a) and (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Suicide (a)</td>
<td>Other External</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>N  %</td>
<td>L  U</td>
<td>L  U</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>21  61.8</td>
<td>56  61.5</td>
<td>1.01</td>
</tr>
<tr>
<td>Female</td>
<td>13  38.2</td>
<td>35  38.6</td>
<td>1</td>
</tr>
<tr>
<td>Place of birth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>31  93.9</td>
<td>84  92.3</td>
<td>1.29</td>
</tr>
<tr>
<td>Other</td>
<td>2  6.1</td>
<td>7  7.7</td>
<td>1</td>
</tr>
<tr>
<td>Indigenous Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aboriginal and/or Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torres Strait Islander</td>
<td>15  46.9</td>
<td>5  5.7</td>
<td>14.47***</td>
</tr>
<tr>
<td>Other Australian</td>
<td>17  53.1</td>
<td>82  94.3</td>
<td>1</td>
</tr>
<tr>
<td>ARIA+ 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan</td>
<td>11  33.3</td>
<td>38  43.2</td>
<td>1</td>
</tr>
<tr>
<td>Regional</td>
<td>15  45.5</td>
<td>43  48.9</td>
<td>1.21</td>
</tr>
<tr>
<td>Remote</td>
<td>7  21.2</td>
<td>7  8</td>
<td>3.46*</td>
</tr>
<tr>
<td>SEIFA 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low or very low</td>
<td>18  54.5</td>
<td>50  56.8</td>
<td>0.90</td>
</tr>
<tr>
<td>Moderate</td>
<td>10  30.3</td>
<td>25  28.4</td>
<td>1</td>
</tr>
<tr>
<td>High or very high</td>
<td>5  15.2</td>
<td>13  14.8</td>
<td>0.96</td>
</tr>
<tr>
<td>Known to child safety services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>14  41.2</td>
<td>22  24.2</td>
<td>2.20</td>
</tr>
<tr>
<td>No</td>
<td>20  58.8</td>
<td>69  75.8</td>
<td>1</td>
</tr>
<tr>
<td>Siblings known to child safety services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6  17.6</td>
<td>15  16.7</td>
<td>1.07</td>
</tr>
<tr>
<td>No</td>
<td>28  82.4</td>
<td>75  83.3</td>
<td>1</td>
</tr>
</tbody>
</table>

***p < 0.001; **p < 0.01; *p < 0.05
1ARIA+ Accessibility Remoteness Indexes for Areas
2SEIFA Socio-Economic Indexes for Areas
Missing values: Indigenous status – 36 (8 S; 28 OE), Place of birth – 4 (3 S; 1 OE), Siblings known to child safety services – 4 (1 S; 3 OE), ARIA+, SEIFA – 20 (2 S; 18 OE)
5.5.2 Comparison of suicides of children and adolescents

Hanging was the predominate method for both age groups (91.2% of children and 79.1% of adolescents; Figure 5.1). While children were more likely to use hanging compared to adolescents, this finding did not reach significance (OR = 2.73, 95% CI = 0.77-9.68).

![Pie chart showing suicide methods of children (10-14 years) and adolescents (15-17 years)]

*Figure 5.1. Suicide methods of children (10-14 years) and adolescents (15-17 years)*

Mental and behavioural disorders were detected in 50% of children and 57.3% of adolescents. Disorders Usually Diagnosed in Infancy, Childhood, or Adolescence, such as Attention Deficit and Hyper-Activity Disorder (ADHD), were significantly more frequent in children (OR = 6.80, 95% CI = 2.04-22.64). Mood disorders, such as depression, were significantly more common in adolescents, compared to children, accounting for almost 48% of cases (OR = 0.31, 95% CI = 0.12-0.77). Children were significantly less likely to have been prescribed medication, including psychotropic and non-psychotropic, compared to adolescents (OR = 0.17, 95% CI = 0.04-0.77; Table 5.3).
Table 5.3 *Psychosocial and Psychiatric Variables of Children (10-14 years) and Adolescents (15-17 years) who died by Suicide*

<table>
<thead>
<tr>
<th></th>
<th>Child suicides</th>
<th>Adolescent suicides</th>
<th>OR</th>
<th>95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Mental health and behavioural issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disorders usually diagnosed in infancy, childhood, or adolescence</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mental health and behavioural issues</td>
<td></td>
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</tr>
<tr>
<td>Substance related disorders</td>
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<tr>
<td>Schizophrenia or other psychotic disorders</td>
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<tr>
<td>Mood disorders</td>
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<tr>
<td>Anxiety disorders</td>
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<td></td>
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<tr>
<td>Eating disorders</td>
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<tr>
<td>Adjustment disorders</td>
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<td></td>
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<tr>
<td>Personality disorders</td>
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<td></td>
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<tr>
<td>Prescribed medication</td>
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<tr>
<td>Familial contagion</td>
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<tr>
<td>Imitative contagion</td>
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<tr>
<td>Explicit statement of suicidal intent</td>
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<tr>
<td>Implied statement of suicidal intent</td>
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</tr>
<tr>
<td>Prior suicidal behaviour</td>
<td></td>
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</tr>
<tr>
<td>Previous suicidal ideation</td>
<td></td>
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</tr>
<tr>
<td>Previous self-harm</td>
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</tr>
<tr>
<td>Previous suicide attempt</td>
<td></td>
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<td></td>
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<tr>
<td>Alcohol consumed prior to suicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of physical, sexual and emotional abuse</td>
<td></td>
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<tr>
<td>Domestic violence</td>
<td></td>
<td></td>
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<tr>
<td>Precipitating incident within 6 months prior to death</td>
<td></td>
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<tr>
<td>Childhood Trauma Identified</td>
<td></td>
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<tr>
<td>Bereavement Identified</td>
<td></td>
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<tr>
<td>Familial conflicts/issues</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Romantic relationship problems</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Interpersonal Conflict Identified</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Health issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education/school/work problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Issues Identified</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Problems Identified</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homelessness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** p < 0.001; ** p < 0.01; * p < 0.05

Missing values: Alcohol consumed prior to suicide – 18; History of abuse & Domestic violence – 10; Mental health – 7; Imitative contagion & Prior suicidal behaviour - 6
No significant differences were found between children and adolescents who died by suicide in terms of exposure to suicidal behaviour by family or peers, or in terms of explicit or implied statements of intent prior to suicide. Previous suicidal behaviour was identified in 48.5% of children and 60% of adolescents. More specifically, children and adolescents did not significantly differ in terms of ideation (29.4% vs. 41.7%), self-harm (25.8% vs. 30.5%), or previous attempts (Table 5.3; 26.5% vs. 26.6%). Children consumed alcohol prior to suicide significantly less frequently than adolescents (16.7% vs. 38.6%; OR = 0.32, 95% CI = 0.11-0.90).

No significant differences in history of abuse were found between children and adolescents (Table 5.3). Specifically, over one-third of children (34.4%) and adolescents (39.3%) were identified as having had experienced physical, sexual, or emotional abuse during their lifetime. No significant differences in occurrence of domestic violence within the home were found between children and adolescents who died by suicide.

The occurrence of a precipitating life event within six months prior to suicide was identified in almost 79.4% of children and 87% of adolescents. Children who died by suicide were significantly less likely to have experienced romantic relationship problems in the six months prior to death compared to adolescents (14.7% vs. 33%, respectively; OR = 0.35, 95% CI = 0.13-0.97). There was a non-significant trend toward children experiencing familial problems as a precipitating event to suicide more often than adolescents (52.9% vs. 35.7%, respectively).

A binary logistic regression was applied to determine the independent contribution of significant variables identified in previous analyses (Table 5.4). Variables, which were significantly different between child and adolescent suicides, were entered into a backward stepwise logistic regression. The full model containing all predictors was statistically
significant ($\chi^2 = 37.77, p < 0.001$) indicating the model was capable of distinguishing between children and adolescents who died by suicide. The final model had an adequate fit following the Hosmer-Lemeshow goodness of fit test ($\chi^2 (7) = 3.58, p = 0.826$), and explained between 21.5% (Cox and Snell R Square) and 32.6% (Nagelkerke R Squared) of the variance in the outcome variable (Table 5.4).

Table 5.4 *Logistic Regression Model for Children (10-14 years) Compared to Adolescents (15-17 years) Suicides*

<table>
<thead>
<tr>
<th></th>
<th>OR</th>
<th>95%CI</th>
<th>Wald</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aboriginal and/or Torres Strait Islander</td>
<td>4.14</td>
<td>1.52</td>
<td>11.23</td>
<td>0.005</td>
</tr>
<tr>
<td>Unknown</td>
<td>2.29</td>
<td>0.36</td>
<td>14.47</td>
<td>0.78</td>
</tr>
<tr>
<td>Other Australian</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disorders usually diagnosed in infancy,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>childhood, or adolescence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>15.20</td>
<td>2.78</td>
<td>83.21</td>
<td>0.002</td>
</tr>
<tr>
<td>Unknown</td>
<td>1.40</td>
<td>0.23</td>
<td>8.68</td>
<td>0.13</td>
</tr>
<tr>
<td>No</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prescribed medication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0.06</td>
<td>0.01</td>
<td>0.46</td>
<td>0.75</td>
</tr>
<tr>
<td>Unknown</td>
<td>1.10</td>
<td>0.03</td>
<td>47.51</td>
<td>0.960</td>
</tr>
<tr>
<td>No</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol consumed prior to suicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0.19</td>
<td>0.05</td>
<td>0.67</td>
<td>6.60</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.75</td>
<td>0.20</td>
<td>2.87</td>
<td>0.18</td>
</tr>
<tr>
<td>No</td>
<td>1.00</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Method: Backward stepwise, Hosmer-Lemeshow goodness of fit test ($\chi^2 (7) = 3.58, p = 0.826$), Nagelkerke $R^2 = .326$, Cox & Snell $R^2 = .215$

Indigenous status, Disorders Usually Diagnosed in Infancy, Childhood, or Adolescence, prescribed medication, and alcohol consumed prior to suicide remained in the final model (Table 5.4). More specifically, being an Aboriginal and/or Torres Strait Islander and the presence of a Disorder Usually Diagnosed in Infancy, Childhood, or Adolescence increased the odds of suicide in children compared to adolescent suicides. Conversely, the prescription of medication and consumption of alcohol prior to suicide decreased the odds of
suicide in children compared to adolescents (Table 5.4). In total, 82.6% of child suicides and adolescent suicides were classified correctly with the variables in the final models.

5.6 Discussion

The Queensland CDR, a comprehensive database including child and adolescents deaths since 2004, was used to analyse child and adolescent suicides. More specifically, demographic factors associated with child suicide were investigated by comparing children and adolescents who died by suicide to those who died by OEC. In addition, the psychosocial and psychiatric differences between children and adolescents who died by suicide were explored.

Overall, in Queensland, males die by suicide more often than females with a gender ratio of 3.1 in 2008-2010 (De Leo et al., 2013). Gender asymmetry is less evident among child and adolescent suicides. Male suicides were slightly more prevalent compared to females, with boys comprising approximately 60%. This is smaller compared to the 72% reported in New Zealand (Beautrais, 2001a), and 71% in Norway (Freuchen et al., 2012b).

Suicide among Aboriginal and Torres Strait Islander Australians is habitually greater compared to other Australians (De Leo et al., 2011). This is particularly the case in children and young people. Here, the analysis showed that 47% of suicide deaths were Aboriginal and Torres Strait Islander children compared to 6% in other external causes of deaths. Furthermore, Aboriginal and Torres Strait Islander suicides were also significantly more prevalent in children when compared to adolescents (25%). In general, intergenerational trauma as a consequence to colonisation, forceful removal, social isolation, fragmented cultural identity, and racism has been indicated as contributing to the heightened risk of suicide among Indigenous Australians (De Leo et al., 2011; Tatz, 2005). A survey from
Western Australia found that 24% of Aboriginal children and youth aged 4-17 years were at high risk of clinically significant emotional and behavioural problems, compared to 15% in non-Aboriginal children (Zubrick et al., 2005). Emotional or behavioural difficulties were higher in younger Aboriginal children (4–11 years, 26%), compared to older children (12–17 years, 20.5%). Several factors instrumental to this increased risk of emotional and behavioural problems have been cited, including: the destruction of families, family discord, continued socio-economic disadvantage, scant access to appropriate services, poor physical health, substance misuse, and smoking (Adermann & Campbell, 2007; Zubrick et al., 2005). However, it has been suggested that Western treatment models of mental and behavioural problems do not adequately embody Aboriginal and Torres Strait Islanders’ perspectives regarding mental health (Vicary & Westerman, 2004).

More than 90% of children used hanging, compared to 79% of adolescents who used more varying methods of suicide. Hanging is even less common in older populations who suicide; in 2008-2010, hanging accounted for 44% of suicides in the age group 35-54 years in Queensland (De Leo et al., 2013). This could reflect some misclassification of other methods. Indeed, research has suggested that underestimation of suicide due to under-reporting and misclassification may be exaggerated in cases involving children, compared to adolescents and adults (De Leo, 2010). Children have been found to report realistic and varied methods of suicide (Mishara, 1998). Methods such as jumping from a height, running into traffic, or self-poisoning, if used by children, could be recorded as accidents (Grøholt & Ekeberg, 2003). There is empirical evidence indicating that the methods perceived by adults to be tragic accidents are methods suggested by children as potential means to end one’s life (Mishara, 1998). The method of assessment used within the CDR, arguably leads to a lower threshold for classifying a death as a suicide. Therefore, the CDR is an invaluable assessment source for suicide in cases involving children.
Children with psychiatric disorders have been found to be more likely to engage in suicidal behaviour, with suggestions that these disorders are present in up to 95% of child and adolescent suicides (Grøholt & Ekeberg, 2003). In the current study, half the children who died by suicide had mental health and behavioural problems. This is similar to the average found by Dervic and colleagues (2008) for the age group 14 years and younger; however, it is much higher than the 23% previously reported in New Zealand (Beautrais, 2001a).

Specifically, Disorders Usually Diagnosed in Infancy, Childhood, or Adolescence, such as ADHD, were the most prevalent psychiatric disorders in children who died by suicide (25%). ADHD was significantly more common in children compared to adolescents. In contrast, mood disorders were significantly more common in adolescents. However, a relatively small proportion of children were on prescribed medication – only 6% of children compared to 27% of adolescents who died by suicide.

Any type of previous suicidality was found in almost half the children and 60% of the adolescents. This finding highlights the danger of underestimating the intensity of children’s emotions and the seriousness of their suicidal expression or behaviour (McGuire, 1982). It further emphasises the importance of taking all suicidal communication by children and adolescents seriously. Indeed, most children have an understanding of both death and the concept of suicide by age eight (Mishara, 1999). Furthermore, it has become more accepted by child development specialists that the intent to cause self-harm or death is most important, regardless of the child’s cognitive understanding of the lethality, finality, or outcomes of their actions (Pfeffer, 1997; Tishler et al., 2007).

Adverse events, such as physical and sexual abuse, witnessing or experiencing violence, and a history of maltreatment are considered to be risk factors for suicidal behaviour in young people (Séguin et al., 2011; Tishler et al., 2007). Indeed, the presence of
physical, sexual, emotional abuse, and/or neglect was evident in over one-third of the children and adolescents who died by suicide. Furthermore, 41% of the children who died by suicide were known to the child protection system within three years of their death; however, this was also the case in almost one-quarter of the children who died by other external causes of death.

Precipitating events within the six months prior to suicide was identified in almost 80% of children and 87% of adolescents; however, the type of events varied. Problems associated with romantic relationships were significantly more likely to be identified in adolescents compared to children. In contrast, children were more likely to be identified as experiencing familial conflict or issues. Interpersonal and familial conflicts, particularly parent-child conflicts, have previously been identified as a salient predictive factor for children as it appears more frequently than in cases involving other life stages (Grøholt et al., 1998). Further, parent-child conflicts as a preceding event have been found to be more common in children compared to adolescents, whose growing impetus for individualisation and autonomy shifts focus to relationships and experiences outside of the family structure (Pelkonen & Marttunen, 2003).

Some limitations should be considered. The database contains information about psychosocial and psychiatric variables only for suicides and not for OEC and information about some of these variables is limited. Information regarding mental health and behavioural issues relies on the accuracy of external sources, such as police or coronial information and the conjecture of parents. Consequently, the prevalence of psychopathology in children and adolescents could be under-reported. Although the retrospective nature could influence the reliability and validity of the data, comparison with other external causes of death should present real differences.
Our cut-off age between childhood and adolescence may be subject to debate. However, it is acknowledged here that children and adolescents differ in terms of physical, sexual, cognitive and social development (Grøholt et al., 1998). Biological age is often used to portray a child’s progression through these changes with the transition from childhood to adolescence marked with the onset of puberty. Whilst there is an approximate trajectory for these development stages, there is large variation in the onset of puberty through genetic, environmental, and social influences. As such, defining ‘child’ using age-related schema without consideration of social and other forces is considered problematic (Boocock & Scott, 2005; James & James, 2008). Despite the potential difficulties in defining ‘childhood’ and ‘adolescence’ in this age-related context, doing so allows the “establishment of uniformly applicable boundaries to separate children from adults” (James & James, 2008, p. 7).

In conclusion, considering the differences between children and adolescents who die by suicide it is clear that they warrant separate consideration in suicide research and prevention. Current findings highlight the multifaceted nature of suicide and demonstrate the importance of considering socio-environmental elements in the prevention of child suicide.

5.7 Chapter Summary

Between 2004 and 2012, 149 child and adolescent suicides were recorded - 34 of children aged 10-14 years and 115 of adolescents aged 15-17 years. The gender asymmetry was less evident in child suicides and suicides were significantly more prevalent in Indigenous children. Children residing in remote areas were significantly more likely to die by suicide than OEC, compared to children in metropolitan areas. Types of precipitating events differed between children and adolescents, with children more likely to experience family problems. Disorders Usually Diagnosed during Infancy, Childhood or Adolescence (e.g., ADHD) were significantly more common among children, compared to adolescents
who died by suicide. Psychosocial and environmental aspects of children in addition to mental health and behavioural difficulties are important in the understanding of suicide in this age group and the development of targeted suicide prevention.
Chapter 6

Study Component Two: Suicides in Aboriginal and Torres Strait Islander children

(Paper 3)

6.1 Notes

This chapter is reproduced from the paper ‘Suicides in Aboriginal and Torres Strait Islander children: Analyses of Queensland Suicide Register’. The PhD Candidate is the first author on this published paper. The second and third authors are the principal and associate supervisor of the candidate respectively. K. Kõlves and D. De Leo contributed to the conceptualization of the study. R. Soole was responsible for the data analysis and was supervised during this process by K. Kõlves. R. Soole drafted the manuscript and K. Kõlves contributed to the writing of the manuscript. D. De Leo revised the final manuscript critically for important intellectual content. All authors read and approved the final manuscript.

This paper is published in *The Australian and New Zealand Journal of Public Health*, which has an Impact Factor of 1.529. The copyright specifications of this journal permit the inclusion of this paper within this dissertation.


6.2 Overview and Contribution of Paper to Research Aims

The analysis of the Queensland Child Death Register (CDR) presented in Chapter Five demonstrated that Aboriginal and Torres Strait Islander children were at overrepresented
in suicide figures for children and adolescents. The primary aim of this quantitative study was to compare current suicide rates of Aboriginal and Torres Islander and other Australian children (aged 10-14 years) in Queensland (Aim 3, see Section 3.8.1), and delineate the factors associated with Indigenous child suicide when compared to other Australian children (Aim 4, see Section 3.8.1). Using the Queensland Suicide Register, the suicides of Indigenous children (10-14 years) and suicides of other Australian children in the same age band were compared.

6.3 Introduction

Suicide rates across the lifespan are consistently higher in Indigenous populations throughout the world (De Leo et al., 2011). This is also consistent with Queensland’s Indigenous child population. A recent analysis showed that the suicide rate among Aboriginal and Torres Strait Islander children aged 5-14 years was 4.61 per 100,000 population, compared to 0.48 per 100,000 in other Australian children of the same age band, for the period 1994 to 2007. This represented an almost 10-times greater risk of suicide for Indigenous children compared to other Australian children living in Queensland (De Leo et al., 2011).

The reasons for the over representation of Aboriginal and Torres Strait Islander population in suicide statistics are not clear. However, several possible explanations have been proposed, including intergenerational trauma as a consequence to colonisation, forceful removal, enduring racism, and disintegrated cultural identity (Tatz, 2005).

Indigenous children have also been found to be at a heightened risk for clinically-significant emotional and behavioural difficulties, compared to non-Indigenous children (Zubrick et al., 2005). Reconstituted families, family discord, socio-economic disadvantage,
minimized access to appropriate services, poor physical health, and substance misuse and smoking have been indicated as contributing to the heightened risk of emotional and behavioural difficulties for Indigenous children (Adermann & Campbell, 2007).

The current analysis aims to: 1) compare current suicide rates of Aboriginal and Torres Islander and other Australian children (aged 10-14 years) in Queensland, and 2) compare the demographic, psychosocial, and psychiatric factors between Aboriginal and Torres Strait Islander and other Australian child suicides in Queensland.

6.4 Method

6.4.1 Data source

Data of all suicides of children aged 10-14 years occurring during the period of 2000-2010 in Queensland were derived from the Queensland Suicide Register (QSR). The QSR is a Queensland Mental Health Commission (QMHC) funded suicide mortality database maintained by the Australian Institute for Suicide Research and Prevention (AISRAP) since 1990 (De Leo, 2010). Data within the QSR are predominately provided to AISRAP by the Office of State Coroners, and includes information derived from police reports, post mortem and toxicology reports. Data are cross-referenced with data available on the National Coronial Information System (NCIS; De Leo et al., 2013). The QSR includes information on a wide range of demographic, psychosocial, psychiatric, medical, contextual, and behavioural aspects of suicide death cases (De Leo et al., 2013).

Ethnicity is recorded within the QSR as Caucasian, Aboriginal/Torres Strait Islander, Asian, and other or unknown. The QSR does not distinguish between Aboriginal or Torres Strait Islander ethnicity and, as such, this paper uses the term ‘Indigenous’ to define individuals of Aboriginal or Torres Strait Islander decent. The QSR classifies suicide into
three levels; ‘Beyond Reasonable Doubt’, ‘Probable’, or ‘Possible’ using the AISRAP-developed ‘Suicide Classification Flow Chart’ (De Leo et al., 2013). Cases classified as ‘possible’ were not included in analysis.

Suicide rates are presented as average yearly number of suicide deaths per 100,000 population for the period 2000-2010. Population data used to calculate suicide rates by Aboriginal and Torres Islander status were obtained from the Population Characteristics, Aboriginal and Torres Strait Islander Australians, 2006 published by the Australian Bureau of Statistics (ABS) (ABS, 2010). To calculate suicide rates by Accessibility/Remoteness Index of Australia Plus (ARIA+), population data was obtained from the 2006 Census of Population and Housing as it includes population numbers by geographical remoteness (ABS, 2006). Cases where ethnicity or no usual address were not stated were not included in the calculations (5.52% and 0.1% of total cases, respectively). Ethical approval was obtained from Griffith University Human Research Ethics Committee (CSR/01/11/HREC).

6.4.2 Variables

Socio-demographic variables included age, gender, and whether the child resided with their parents prior to their suicide. ARIA+ was used to code geographical remoteness to services access (travelling by road). The child’s usual residence was used for this study. The five categories of ARIA+ (major cities, inner regional, outer regional, remote and very remote) were merged for analysis purposes into the following categories: metropolitan (the major cities of Queensland), regional (inner and outer regional areas of Queensland), and remote (remote and very remote areas of Queensland).

Other variables examined included: current or past treatment for psychiatric disorders; evidence for undiagnosed psychiatric disorders; lifetime alcohol and substance use;
consumption of alcohol prior to suicide; expressions of suicidal intent during child’s lifetime; and within 12 months prior to death; interest in suicide through media; and, exposure to suicide by others. Prior suicidality of the child included suicide attempts during the child’s lifetime and within 12 months prior to death.

Life events of significance included: childhood trauma; bereavement; familial conflict/issues; romantic and interpersonal relationship problems; physical health conditions; substance dependency; legal issues; and, school issues.

6.4.3 Statistical analysis

Data analysis was performed in IBM SPSS Statistics 21. Odds ratios (OR) with 95% confidence intervals (95%CI) were calculated. With small numbers (fewer than five), Fisher’s exact test was used. A probability level of 0.05 was considered as significant. In order to compare suicide rates in different groups, Rate Ratios (RR) with 95% CIs were calculated.

6.5 Results

A total of 45 deaths by suicide were recorded for children aged 15 years or younger in Queensland in the time period between 2000 and 2010. Of these 45 deaths, 21 were identified as Aboriginal or Torres Strait Islander children (46.7%). Two cases included in ‘Other Australian children’ were listed as unknown ethnicity but not Indigenous. The mean age for Aboriginal or Torres Strait Islander children and other Australian children was 13.05 and 13.38 years respectively.

Indigenous children had a suicide rate of 10.15 suicides per 100,000 (11.23 for males per 100,000 and 9.00 for females), while other Australian children aged 10-14 years had a
rate of below 1 suicide death per 100,000 (0.85 for males per 100,000 and 0.76 for females).
The rate of suicide among Aboriginal and Torres Strait Islander children was found to be
12.63-times higher than other Australian children (Table 6.1). There were no significant
gender differences for Indigenous children (RR = 1.25, 95% CI = 0.49-3.21), or other
Australian children (RR = 1.12, 95% CI = 0.47-2.68).

Table 6.1 Suicide Rate Ratios of Aboriginal and Torres Strait Islander and Other Australian
Children (10-14 years) by Gender and Accessibility/Remoteness Index of Australia Plus
(ARIA+), Queensland, 2000-2010.

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal and Torres Strait Islander children</th>
<th>Other Australian children</th>
<th>RR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N^</td>
<td>Rate^^</td>
<td>N^</td>
<td>Rate^^</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>10.15</td>
<td>24</td>
<td>0.80</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>11.23</td>
<td>13</td>
<td>0.85</td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
<td>9.00</td>
<td>11</td>
<td>0.76</td>
</tr>
<tr>
<td>ARIA+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan</td>
<td>0</td>
<td>0.00</td>
<td>9</td>
<td>0.56</td>
</tr>
<tr>
<td>Regional</td>
<td>9</td>
<td>9.54</td>
<td>15</td>
<td>1.40</td>
</tr>
<tr>
<td>Remote</td>
<td>12</td>
<td>33.75</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

^ Total number of suicides in 2000-2010
^^ Average yearly rate during the period for total and by gender, for ARIA+
-- Not calculable
* p < 0.05

Between 2000 and 2010, there were no suicides among other Australian children
living in remote areas, while the highest suicide rates among Indigenous children were for
those living in remote areas (33.75 per 100,000; p < 0.001; Table 6.1). There were no
suicides among Indigenous children living in metropolitan areas, while other Australian
children living in metropolitan areas had a suicide rate of 0.56 per 100,000. The suicide rate among Aboriginal and Torres Strait Islander children living in regional areas (9.54 per 100,000) was significantly higher compared to other Australian children living in regional areas (1.40 per 100,000; RR = 6.81, 95% CI = 2.76-16.50; Table 6.1).

Indigenous children were significantly more likely to be residing outside the parental home prior to suicide compared to other Australian children. In total, over one-quarter of Indigenous children (28.6%) who died by suicide were living in a different residence to their parents prior to their death, compared to only 4.2% of other Australian children (p = 0.031).

The preponderate suicide method for both Indigenous and other Australian children was hanging (95.2% and 95.8%, respectively). The majority of other Australian children suicided within their usual residence (87.5%), compared to just over one-half (52.4%) of Indigenous children who were significantly more likely to suicide outside their home (p = 0.011; Table 6.2). Indigenous children were significantly less likely to leave a suicide note, compared to other Australian children (9.5% vs. 37.5%, respectively; p = 0.031).

Overall, a diagnosis of any psychiatric disorder was significantly less common in Indigenous children (4.8%), compared to other Australian children (29.2%, p = 0.037; Table 6.2). Despite all specific psychiatric disorders being more frequent in other Australian children, when compared to Aboriginal and Torres Strait Islander they did not reach significance (unipolar depression [0% vs. 12.5%]; developmental disorders [4.8% vs. 8.3%]; substance use disorders [0% vs. 4.2%]; or other/vague disorders [0% vs. 4.2%; Table 6.2]). In addition, current or past treatment for a psychiatric disorder was significantly less common in Indigenous children (4.8%), compared to other Australian children (29.2%; p = 0.037). Results indicated no significant differences between Indigenous children and other Australian
children in terms of evidence for undiagnosed mental health issues (14.3% vs. 20.8%; Table 6.2).

Analysis of toxicology results revealed there was a significant trend of Indigenous children (33.3%) consuming alcohol prior to suicide more frequently than other Australian children ($p=0.014$). Results indicated that Indigenous children and other Australian children did not differ in terms of lifetime use of alcohol (14.3% vs. 12.5%, n.s) and illicit drugs (28.6% vs. 20.8%, n.s). The most frequently used substance for both Indigenous children and other Australian children during lifetime was cannabis (19% vs. 20.8%).

No significant differences were found between Indigenous children and other Australian children who died by suicide in terms of exposure to suicide by family or peers (33.3% vs. 25%), in communication of intent to suicide during their lifetime (33.3% vs. 41.7%), in the 12 months prior to suicide (28.6% vs. 33.3%), in terms of an attempt during the child’s lifetime (23.8% vs. 20.8%), or during the 12 months prior to suicide (19% vs. 20.8%; Table 6.2). However, interest in suicide in media was more frequent in other Australian children (4.8% vs. 20.8%), but did not reach significance.

Physical health conditions at time of death were less prevalent in Aboriginal and Torres Strait Islander children compared to other Australian children (9.5% vs. 20.8%), but not significantly. Overall, the occurrence of a life event was identified in 61.9% of Indigenous children and 66.7% of other Australian children. The most common life event for both Indigenous and other Australian children was familial conflict (28.6% vs. 37.5%). A school issue included non-attendance ($n = 4$; either by non-enrolment or recent suspension), academic or behaviours issues ($n = 4$), and bullying ($n = 1$). Indigenous children and other Australian children did not differ significantly in terms of the specific life events experienced (Table 6.2).
Table 6.2 Demographic, Psychosocial and Psychiatric Variables of Aboriginal and Torres Strait Islander and Other Australian Children (10-14 years) who died by Suicide for the Time Period 2000-2010.

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal and Torres Strait Islander children</th>
<th>Other Australian children</th>
<th>OR</th>
<th>95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N %</td>
<td>N %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12 57.1</td>
<td>13 54.2</td>
<td>0.89</td>
<td>0.27</td>
</tr>
<tr>
<td>Female</td>
<td>9   42.9</td>
<td>11 45.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARIA+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan</td>
<td>0    0</td>
<td>9  37.5</td>
<td>Fisher’s Exact = 0.001*</td>
<td></td>
</tr>
<tr>
<td>Regional</td>
<td>9   42.9</td>
<td>15 62.5</td>
<td>Fisher’s Exact = 0.14</td>
<td></td>
</tr>
<tr>
<td>Remote</td>
<td>12  57.1</td>
<td>0  0</td>
<td>Fisher’s Exact &lt; 0.001*</td>
<td></td>
</tr>
<tr>
<td>Living arrangements at time of death</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elsewhere</td>
<td>6   28.6</td>
<td>1  4.2</td>
<td>Fisher’s Exact = 0.031*</td>
<td></td>
</tr>
<tr>
<td>Living with parents</td>
<td>15  71.4</td>
<td>23 95.8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Suicide Site</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elsewhere</td>
<td>10  47.6</td>
<td>3  12.5</td>
<td>Fisher’s Exact = 0.011*</td>
<td></td>
</tr>
<tr>
<td>Own residence</td>
<td>11  52.4</td>
<td>21 87.5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Suicide Note</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2   9.5</td>
<td>9  37.5</td>
<td>Fisher’s Exact = 0.031*</td>
<td></td>
</tr>
<tr>
<td>No or unknown</td>
<td>19  90.5</td>
<td>15 62.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any psychiatric disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unipolar depression</td>
<td>0   0</td>
<td>3  12.5</td>
<td>Fisher’s Exact = 0.143</td>
<td></td>
</tr>
<tr>
<td>Developmental disorder</td>
<td>1   4.8</td>
<td>2  8.3</td>
<td>Fisher’s Exact = 0.551</td>
<td></td>
</tr>
<tr>
<td>Substance use disorder</td>
<td>0   0</td>
<td>1  4.2</td>
<td>Fisher’s Exact = 0.533</td>
<td></td>
</tr>
<tr>
<td>Other or vague disorder</td>
<td>0   0</td>
<td>1  4.2</td>
<td>Fisher’s Exact = 0.533</td>
<td></td>
</tr>
<tr>
<td>Current or past treatment for psychiatric disorders</td>
<td>1   4.8</td>
<td>7  29.2</td>
<td>Fisher’s Exact = 0.037*</td>
<td></td>
</tr>
<tr>
<td>Evidence for undiagnosed disorder</td>
<td>3 14.3</td>
<td>5  20.8</td>
<td>Fisher’s Exact = 0.431</td>
<td></td>
</tr>
<tr>
<td>Alcohol consumed prior to suicide</td>
<td>7   33.3</td>
<td>1  4.2</td>
<td>Fisher’s Exact = 0.014*</td>
<td></td>
</tr>
<tr>
<td>Alcohol use during lifetime</td>
<td>3   14.3</td>
<td>3  12.5</td>
<td>Fisher’s Exact = 0.600</td>
<td></td>
</tr>
<tr>
<td>Illicit drug use during lifetime</td>
<td>6   28.6</td>
<td>5  20.8</td>
<td>1.52</td>
<td>0.39</td>
</tr>
<tr>
<td>Cannabis</td>
<td>4   19.0</td>
<td>5  20.8</td>
<td>Fisher’s Exact = 0.590</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aboriginal and Torres Strait Islander children</td>
<td>Other Australian children</td>
<td>OR</td>
<td>95% CI</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------</td>
<td>-------------</td>
<td>--------------</td>
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<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Amphetamine</td>
<td>1</td>
<td>4.8</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Inhalants</td>
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<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Prescription drugs</td>
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<td>4.8</td>
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<td>0</td>
</tr>
<tr>
<td>Other or unspecified</td>
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<td>4.8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Exposure to suicide</td>
<td>7</td>
<td>33.3</td>
<td>6</td>
<td>25.0</td>
</tr>
<tr>
<td>Interest in suicide through media</td>
<td>1</td>
<td>4.8</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>Communication of intent during lifetime</td>
<td>7</td>
<td>33.3</td>
<td>10</td>
<td>41.7</td>
</tr>
<tr>
<td>Communication of intent in 12 months prior</td>
<td>6</td>
<td>28.6</td>
<td>8</td>
<td>33.3</td>
</tr>
<tr>
<td>Suicide attempt in lifetime</td>
<td>5</td>
<td>23.8</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>Suicide attempt in 12 months prior</td>
<td>4</td>
<td>19.0</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>Any physical health conditions</td>
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<td>9.5</td>
<td>5</td>
<td>20.8</td>
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<td>Life events</td>
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<td>61.9</td>
<td>16</td>
<td>66.7</td>
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<td>History of legal problems</td>
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<td>14.3</td>
<td>2</td>
<td>8.3</td>
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<td>Pending legal matters</td>
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<td>4.8</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Relationship problems</td>
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<td>14.3</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>Bereavement</td>
<td>2</td>
<td>9.5</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>Interpersonal conflict</td>
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<td>9.5</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>Familial conflict</td>
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<td>28.6</td>
<td>9</td>
<td>37.5</td>
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<tr>
<td>School problems</td>
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<td>6</td>
<td>25.0</td>
</tr>
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<td>Childhood trauma</td>
<td>2</td>
<td>9.5</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>19.0</td>
<td>4</td>
<td>16.7</td>
</tr>
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1ARIA+ Accessibility Remoteness Indexes for Areas
* p < 0.05
6.6 Discussion

Suicide in Aboriginal and Torres Strait Islanders is significantly more frequent compared to other Australians, particularly in the case of children. The elevated suicide risk in young Indigenous people was recognised as a priority in the National Aboriginal and Torres Strait Islander Suicide Prevention Strategy (Department of Health and Ageing [DOHA], 2013). Analysis showed that in Queensland, during the time period 2000 – 2010, the suicide rate among Aboriginal and Torres Strait Islander children was 10.15 suicides per 100,000, which was more than 12-times higher than other Australian children aged 10-14 years.

Several important differences between Indigenous and non-Indigenous children were delineated. Although it has been noted that mental health problems are less frequent in child deaths, the contribution of mental health and behavioural difficulties and the engagement in suicidal behaviour by children has been previously illustrated (Dervic et al. 2008; Grøholt & Ekeberg, 2003). However, some ambiguity exists regarding the contribution of these factors in the development of suicidal behaviour among Indigenous people specifically (Reser, 1991), and whether psychiatric disorders among Indigenous individuals could be phenomenologically different (Vicary & Westerman, 2004).

Chenhall and Senior (2009) maintain that there is a distinct lack of understanding regarding cultural specificities of mental health from the perspectives of Indigenous Australians. However, research indicates that Indigenous Australians experience increased risk for mental health concerns (Hunter, 2007). Indeed, Zubrick and colleagues (2005) found that 24% of Indigenous children and youth aged 4-17 years were at high-risk of clinically-significant emotional and behavioural problems, compared to 15% in non-Indigenous
children. In the current study, less than 5% of Indigenous children who died by suicide had been diagnosed with a psychiatric disorder prior to death, significantly less compared to almost one-third of other Australian children who had received a diagnosis prior to suicide. The lower prevalence of psychiatric disorders in Indigenous children may be a manifestation of the unsuitable application of the Western conceptualisation of psychiatric disorders, which may not adequately represent the various Indigenous holistic perspectives regarding mental health (Vicary & Westerman, 2004). In addition, the lower prevalence of psychiatric disorders could be partly explained by the paucity of specialised services and lack of culturally-appropriate diagnostic tools (Pridmore, 2009).

Significantly fewer Indigenous children were currently receiving, or had previously received, treatment for psychiatric difficulties prior to suicide compared to other Australian children. Help-seeking behaviour has been found to be lower in Indigenous populations (Berry & Crowe, 2009; Sveticic, Milner, & De Leo, 2012; Westerman, 2004). Limited access to, and availability of, mental health professionals with the skills required to recognise (and therefore accordingly treat) mental health and behavioural problems may begin to explain this disparity; an issue further compounded by rural location, with children being particularly vulnerable (Hunter, 2007; Vicary & Bishop, 2005). Indeed, no Indigenous children in this study resided in metropolitan areas and over half lived in remote or very remote areas.

Several additional factors stemming from the close-knit nature, characteristic of Indigenous communities have been identified as impeding help-seeking behaviour, including confidentiality issues and fear of stigma or other ramifications following disclosure of suicidal behaviour (Farrelly, 2008). Moreover, research has suggested that, when obtained, professional mental health services are culturally-insensitive and do not successfully

The involvement of alcohol and other substances at time of death in Indigenous suicide has been illustrated in extant literature (Berry & Crowe, 2009; Laliberté & Tousignant, 2009; Tatz, 2005). Indigenous children were noted to consume alcohol significantly more frequently prior to suicide than other Australian children. This may be indicative of a greater likelihood of impaired cognitive capacity at time of suicidal act (Laliberté & Tousignant, 2009), or reflect overall higher rates of alcohol use at hazardous levels within Indigenous populations (Australian Institute of Health and Welfare [AIHW], 2011).

It is pertinent to note that all suicide deaths of Aboriginal and Torres Strait Islander children occurred in regional (9.54 per 100,000) or remote areas (33.75 per 100,000). Geographic isolation has been previously identified as being characteristic of Indigenous suicides (Hanssen, 2007). Compared to other Australians, Aboriginal and Torres Strait Islander people are disadvantaged on many social indicators (Vicary & Westerman, 2004), and Hunter (2007) posits that this disadvantage can be exacerbated in remote areas. Another potential reason could be greater possibility for exposure to suicidal behaviour and subsequent potential for contagion and de-sensitisation to both death and suicide due to the tight-knit nature, characteristic of Indigenous communities (Farrelly, 2008).

While a number of non-Indigenous-specific programs show promising results, these require additional research and evaluation in their success for Indigenous populations (AIHW, 2013). Additional suicide prevention activities tailored specifically for Indigenous people are needed and future work should aim to further develop targeted, culturally-appropriate, and accessible service provisions.
Some limitations should be considered. Cases contained in the population data from the ABS Census (ABS, 2009) where ethnicity was not stated (<6%), or with no usual address (0.1%), were excluded when calculating rates by ARIA+. Consequently, there is an overestimation of rates by geographical areas. The QSR is a comprehensive suicide mortality database; however, data is reliant on the accuracy of external sources, such as police or coronial information along with the conjecture of next of kin.

Several important differences emerged between Indigenous and non-Indigenous children. Indigenous children were significantly more likely to suicide outside of the home, to be living outside of the parental home at time of death, and to be living in remote or very remote areas. Compared with other Australian children, Indigenous children were found to consume alcohol more frequently prior to suicide and receive less current and past treatment of psychiatric disorders.

6.7 Chapter Summary

Between 2000 and 2010, 45 suicides child suicides were recorded – 21 of Indigenous children and 24 of other Australian children. This corresponded to a suicide rate of 10.15 suicides per 100,000 for Indigenous children – 12.63-times higher than the suicide rate for other Australian children (0.80 per 100,000). Hanging was the predominant method used by all children. Indigenous children were significantly more likely to suicide outside the home, to be living outside of the parental home at time of death, and to be living in remote or very remote areas. Indigenous children were found to consume alcohol significantly more frequently prior to suicide, compared to other Australian children. Current and past treatments of psychiatric disorders were significantly less common among Indigenous children compared to other Australian children. Western conceptualisations of mental illness may not adequately embody Indigenous people’s holistic perspectives regarding mental
health. Further development of culturally-appropriate suicide prevention activities for Aboriginal and Torres Strait Islander children are required.
Chapter 7

Study Component Three: Psychological Autopsy

“I fear the heartbeat of our science growing faint” (Berman, 2003, p. 203).

7.1 Introduction

The field of suicidology is undoubtedly dominated by quantitative research (Hjelmeland & Knizek, 2010; Kral, Links, & Bergmans, 2012). During a two-year period (2005-2007), Hjelmeland and Knizek (2010) showed that studies published in three prominent international journals on suicidal behaviour (Archives of Suicidal Research, Crisis: The Journal of Crisis Intervention and Suicide Prevention, and Suicide and Life-Threatening Behavior) rarely employed qualitative methodology. In response to the homogenous nature of extant research into suicidology, Hjelmeland and Knizek (2010, 2011) argued the need for contextualised and idiographic research. Indeed, Berman (2003) wrote: “it is the intensive study of the individual that gives our science its richness and its texture. It is ultimately the unique, and individual, suicidal case, intensively studied, that provides the true understanding of suicidal behaviour” (p. 200).

Leenaars (2002b) drew parallels between the suicidology field’s dichotomous research stance regarding quantitative and qualitative investigation with the German philosopher Wilhelm Windelband’s (1848-1915) distinction of nomothetic and idiographic approaches to knowledge. In the nomothetic approach to knowledge, the individual of interest is viewed as an exemplar of the general population, while the idiographic approach involves the intense study of the particular that is unique to the individual. The former generally utilises quantitative methods, while the latter utilises qualitative (Leenaars, 2002b). The nomothetic approach to knowledge through quantitative methods is ubiquitous within
suicidology field (Hjelmeland & Knizek, 2010; Leenaars, 2002b). This most likely stems from the natural sciences and its roots of nomothetic approaches focused on the cause-and-effect goal orientation (Hjelmeland & Knizek, 2010).

Several researchers have argued for a move away from this dichotomous thinking of ‘either’ quantitative ‘or’ qualitative research, with more value so far being placed on quantitative (Hjelmeland & Knizek, 2010, 2011; Leenaars, 2002b). Hjelmeland and Knizek (2010) have gone so far as stating that the application of almost exclusively quantitative methodology has caused the field of suicidology to reach a “dead-end of repetitive research” (p. 74). Instead, it is argued that both the general and unique, nomothetic and idiosyncratic, ways of knowing and doing research are required to advance our understanding of suicidal behaviour. Indeed, Gilham (2000) argued that ‘experimental science’ type approaches are not the most appropriate in terms of “the complexity, embedded character, and the specificity of the real-life phenomena” (p. 6). Here, while there has been much discussion on factors associated with suicide, very little contextual work has been completed (Hjelmeland & Knizek, 2011; Rogers & Lester, 2010).

For these reasons, several papers have articulately argued for the increased integration of quantitative and qualitative methods within suicidology to facilitate and expand on the current understanding of suicidal behaviour for the incorporation of qualitative investigation of suicide in order to advance our understanding (see Fitzpatrick, 2011; Goldney, 2002; Leenaars, 2002a). A mixed-method approach arguably allows for the strengths of both qualitative and quantitative methods to be taken advantage of while mitigating inherent weaknesses (Rogers & Apel, 2010). Allport (1962) powerfully expressed this when he said:

…instead of growing impatient with the single case and hastening on to generalisations, why should we not grow impatient with our generalisations,
and hasten to the internal pattern? For one thing we should ask, are our generalisations really relevant to the case we are studying? If so, do they need modification? And in what ways is this individual the asymptote of all our general laws? (p. 407).

In line with these debates, the methodological approach undertaken within this thesis has not solely been based within a quantitative/nomothetic foundation (for further details, see Chapters Five and Six). The systematic review of child suicide presented in Section 3.5 demonstrated that suicide is associated with an inter-play of psychiatric, psychosocial, environmental, and contextual factors (Soole et al., 2014c). As Leenaars (2002a) argued: “this complexity indicates the necessity of a parallel complexity in study” (p. 19). This parallel complexity has been demonstrated through different, though complementary, components of this thesis. Components One and Two of this thesis (presented in Chapters Five and Six, respectively) investigated child suicide using aggregate-level data. In order to contextualise the findings of these quantitative studies at a more idiographic level, the Psychological Autopsy (PA) method of investigation was applied. Specifically, the aim of this study (Component Three, Part 1) was to assess the demographic, psychosocial, and psychiatric factors associated with children who have died by suicide (10-15 years) in Queensland compared with children (10-15 years) who have died by other external causes of death (OEC) in the same timeframe. Additionally, the use of life charts to construct pathways to suicide in children allowed for the similarities and differences in suicidal processes to be analysed.

This chapter presents the findings from interviews conducted with parents of six children who died by suicide and six children who died by other external causes of death. The interviews, which applied the PA method, gathered information on various domains and thus
attempted to reconstruct the psychological and physiological health, and social circumstances (including adversity and integration), of the child before their death (Cavanagh et al., 2003; Shneidman, 2004). The methodological and ethical considerations of the PA method in the context of the current research program were discussed in Sections 4.2.1.1 and 4.2.1.2 respectively. Further in this chapter, the inclusion criteria and sample recruitment and the measures included in the PA interviews, along with their psychometric merits forming a rationale for their inclusion, are presented. Finally, the data analysis undertaken will be delineated before the presentation of findings.

7.2 Method

7.2.1 Case parameters

Eligible cases were children who were aged 15 years or younger when they died by External Causes of Death (Chapter XX of ICD-10) during the time period 1st January 2005 to 31st December 2012. Specifically: intentional self-harm (X60-X84); accidental deaths including transport (V01-V99), and other external causes of accidental injury (W00-X59), including drowning and submersion, exposure to smoke, fire and flames; fatal assault (X85-Y09), including neglect; and, event[s] of undetermined intent (Y10-Y34). Whilst not categorised under ICD-10, external causes of death through an ill-defined and unknown cause (R99) were also eligible to participate, given their often sudden nature. For the purposes of this study, the ICD-10 subcategories, with the exception of suicide, were combined, and hereinafter are referred to as ‘Other External Causes of Death’ (OEC).

7.2.1.1 Information sources

Information about the deceased children was obtained through PA interviews conducted with the biological parents of children who had died by suicide and the biological
parents of children who had died by OEC; described herein as ‘informants’. In this way, a
purposive criterion sampling strategy was implemented (Teddlie & Yu, 2007). Parents have
previously been highlighted as appropriate and knowledgeable informants (Hawton et al.,
1998). Guest and colleagues (2006) postulate that data saturation can be attained in 6 to 12
interviews providing interviews are reasonably structured, participants have experienced a
similar reality, the area of inquiry is explicit, and the research aims to provide exploratory,
overarching themes.

Information regarding children was supplemented and cross-referenced with the
Queensland Suicide Register (QSR, for suicide cases) and the Child Death Register (CDR,
for both suicide and cases of OEC). The CDR and QSR were described in greater detail in
Sections 4.3.1 and 4.3.2, respectively.

7.2.2 Design

As described previously (see Section 4.2.1), the PA method of investigation was
applied. A retrospective case-series design was utilized for the time period 1st January 2005
to 31st December 2012. Cases were intentional self-harm (X60-X84) younger than 15 years;
comparisons were OEC in the same age band (as specified earlier).

As discussed in Section 4.2.1.1, the decision to use OEC as a comparison group
allowed for the exploration of factors associated with children who ultimately die by suicide
compared to children who die by OEC (Berman et al., 2006; Clark & Horton-Deutsch, 1992;
Hawton et al., 1998). In addition, the inclusion of OEC as the comparison group arguably
mitigates the potentially confounding factor of informant recall bias (De Leo, Draper,
Snowden, & Kõlves, 2013).
7.2.3 Measures

The interview schedule was designed based on extant literature (see Section 3.5) within an overarching ecological framework. The choice of measures included in PA interviews is dependent on the aims of the study (Chachamovich et al., 2013). Since predictive factors for suicide vary across the lifespan (Séguin et al., 2011), and as a way to increase confidence in any conclusions drawn, the factors assessed in this PA interview were required to be (reasonably) associated with suicide in children (Knoll, 2008). In addition, since suicide is a complex, multi-faceted phenomenon, the interviews needed to include extensive information on psychiatric, psychosocial, and environmental variables to suicide (Isometsä, 2001; Knoll, 2008; Pouliot & De Leo, 2006). The factors and areas included in the interview schedule of this study were intentionally as inclusive as possible in order to build the most comprehensive picture of the child’s life and to mitigate previously voiced criticisms of the PA method (see Section 4.2.1). This PA interview aimed to gather information in a semi-structured format using validated psychological scales/questionnaires. While the measures included in the interview schedule could be criticised as providing only a ‘snapshot’ (Maris, 1981), they also presented the potential to reveal “some essential essences of the entire movie [that] can be reasonably inferred” (Leenaars, 2002a, p. 20).

Extensive socio-demographic variables regarding the decedent were obtained during the first part of the PA interview (Appendix 7.1), including:

- Circumstances of death, including location and last person to see child alive;
- Demographic information, including ethnicity, Socio-Economic Indexes for Areas (SEIFA), Accessibility/Remoteness Index of Australia Plus (ARIA+), religion, sexual orientation, living arrangements, presence of domestic
violence (DV), contact with child safety services, or correctional (detention centre), or mental health facility;

- Demographic details of other biological and non-biological care-giver(s) (if any), including informants’ opinions of quality of relationship with child;
- Basic demographic information of sibling(s) (if any), including informants’ opinions of quality of relationship between child and sibling;
- School and social environmental circumstances, including presence of bullying (as victim or perpetrator);
- Decedent’s history of suicidal and self-harming behaviour, including access to firearms, statements of hopelessness, giving away of possessions, interest in suicide through media or literature;
- Decedent’s medical and psychiatric history, including treatment satisfaction;
- Family psychiatric history; and,
- Family history of suicide and/or suicidal behaviour.

An adaption of the Brent and colleagues’ (1987) Exposure to Suicidal Behaviour Scale was included in the first part of this PA interview (Appendix 7.1). This scale records when a child has been exposed to suicidal behaviour (deliberate self-harm [DSH], attempts, and any death by suicide), regardless of perceived impact. If an event is known to have occurred, information regarding the type of relationship(s), suicidal behaviour(s), and impact these events had on the child is then explicated.

Several validated psychometric measures were used in addition to the above when conducting the PA interviews; descriptions of these instruments, along with several of their psychometric properties, are individually discussed in more detail below. Each measure included in the interview schedule is relatively well known and both the validity and
reliability of each measure has been demonstrated in previous studies (for example, see Achenbach & Rescorla, 2001; Nakamura et al., 2009; Sheehan, et al., 2010; Tang et al., 2010; Williamson, et. al., 2003). Copyright permission for each measure was obtained prior to any use and/or modification.

7.2.3.1 Mini International Neuropsychiatric Interview for Children and Adolescents

Parent Version (MINI-KID-PL)

Psychopathology was assessed with the MINI-KID-PL (Appendix 7.2). The MINI-KID is a structured clinical diagnostic interview designed to detect psychiatric disorders in children and adolescents aged 6-17 years (Sheehan et al., 2010). The MINI-KID-PL is the parent-rated version of the MINI-KID (hereafter referred to as MINI) and, as such, designed to be administered to parents (Sheehan et al., 1998). The presence of 24 DSM-IV and ICD-10 disorders is assessed. The MINI is arranged in diagnostic sections or modules (Sheehan et al., 2010). Each module begins with 1-4 screening questions designed to elicit particular diagnostic criteria; these are read to the parent verbatim. Sometimes questions include specific timeframes; for example, when the timeframe is a decisive aspect to the disorder being assessed (Sheehan et al., 1998, 2010). Answers are in a dichotomous ‘yes/no’ format. A parent’s responses to the screening questions dictate whether additional symptom questions are asked or if the interview moves onto the next module. The MINI takes approximately 30 minutes to administer.

Using the Schedule for Affective Disorders and Schizophrenia for School Aged Children-Present and Lifetime Version (K-SADS-PL) as criterion, Sheehan and colleagues (2010) assessed several psychometric properties of the MINI. The MINI demonstrated moderate to almost perfect concurrent validity with the K-SADS-PL for almost all assessed disorders ($\kappa = .56 - .87$); results for psychotic disorders were more variable ($\kappa = .41$). These
results demonstrated that the MINI was a valid measure of psychiatric disorders. In addition, the MINI was reported to have a mean administration time three-times shorter than the K-SADS-PL (Sheehan et al., 2010). Administration time is a salient feature as it has been suggested that parents are more likely to answer ‘no’ during long interviews possibly as an attempt to avoid additional questions that result from answering ‘yes’ (Lucas et al., 1999). Thus, the shorter administration time of the MINI was an important feature when deciding on an appropriate measure. In addition, sensitivity has been demonstrated to be substantial and specificity was excellent in the majority of assessed disorders (Sheehan et al., 2010). Interrater and test/re-test reliability of the MINI has also been demonstrated to be strong (Sheehan et al., 2010; Tang et al., 2010). Importantly, the parent-rated version has been demonstrated as having good concordance with the standard MINI (Sheehan et al., 2010).

7.2.3.2 Child Behaviour Checklist (CBCL)

Social background (such as having friends and the quality of these relationships) and school circumstances (such as achievements and behavioural/social issues) was assessed using the CBCL (Appendix 7.3). Designed to be administered to parents or guardians, the CBCL assesses the capabilities and problem behaviours of children aged between 6 and 18 years. The first part of the CBCL consists of a series of questions, which assess adaptive behaviours and form the following three subscales: activities, social competencies, and school competencies (Achenbach & Rescorla, 2001). The second part of the CBCL consists of 113 questions assessing behaviour. Parents are asked to rate, on a three-point Likert scale, the extent each behavioural item applied to their child. A score of ‘0’ indicates the behaviour was ‘not true’ of their child; ‘1’ indicates ‘somewhat true or sometimes true’; and ‘2’ indicates the behaviour was ‘very true or often true’ of their child (Achenbach & Rescorla, 2001).
These ratings combine to form eight narrow-band scales (or syndromes), two broad-band scales (or syndromes), and a total problem score (Achenbach & Rescorla, 2001). The eight narrow-band scales refer to the presence of smaller behaviour clusters consisting of specific behavioural, social, and emotional problems. They are: anxious/depressed; withdrawn/depressed; somatic complaints; social problems; thought problems; attention problems; rule-breaking behaviour; and, aggressive behaviour (Achenbach & Rescorla, 2001). In addition, there are 17 remaining items, which fall under ‘other problems’.

The eight narrow-band scales group into two high-order factors, or broad-band syndromes, which refer to the presence of larger, more general, behavioural clusters consisting of several different, but related, behavioural problems (Achenbach & Rescorla, 2001). The two broad-band scales are: internalising behavioural problems, which involve over-controlled behaviour; and, externalising behaviour, which involves under-controlled, excess, or acting-out behaviour (Achenbach & Rescorla, 2001). The internalising behaviour scale consists of three narrow-band subscales: anxious/depressed; withdrawn/depressed; and, somatic complaints. Externalising behaviour scale consists of two narrow-band subscales: aggressive behaviour and rule-breaking behaviour (Achenbach & Rescorla, 2001). The total problem score is the sum of the internal and external board-band scales with the remaining narrow-band scales (Achenbach & Rescorla, 2001). The eight narrow-band scales, two broad-band scales, and a total problem score is diagrammatically presented in Figure 7.1 (based on Achenbach & Rescorla, 2001).
Figure 7.1. The eight narrow-band scales, two broad-band scales, and a total problem score of the CBCL
In an attempt to integrate the CBCL with formal diagnostic systems such as the DSM, Achenbach and colleagues (2003) developed DSM-orientated scales to supplement the CBCL syndrome scales. While the aforementioned syndrome scales were constructed through factor analysis, the DSM-orientated scales were derived by inviting 22 highly-experienced child mental health professionals from 16 different cultures to assess the consistency of each item included in the CBCL with DSM diagnostic categories (Achenbach, Dumenci, & Rescorla, 2001, 2003; Rescorla, 2005). The DSM-orientated scales for the CBCL include: Affective Problems, Anxiety Problems, Somatic Problems, Attention Deficit/Hyperactivity Problems, Oppositional Defiant Problems, and Conduct Problems. Similar to the syndrome scales, each of the DSM-orientated scales is calculated by summing the items included within that scale. It is pertinent to note that, while higher scores on DSM-orientated scales can indicate further diagnostic assessment is required, they are not directly equivalent to DSM-diagnosis (Rescorla, 2005).

The CBCL is considered one of the most sophisticated child behavioural assessment tools available and one of the most extensively researched (Merrell, 2008). Normative data on a number of samples exist (Achenbach & Rescorla, 2001). The CBCL has been found to demonstrate moderate to high internal consistency ($\alpha = .78 - .97$), and high inter-rater reliability ($\alpha = .93 - .96$) (Achenbach & Rescorla, 2001). In addition, the CBCL has been found to demonstrate sound content, criterion, and construct validity (Achenbach & Rescorla, 2001; Nakamura et al., 2009).

7.2.3.3 Stressful Life Events Schedule (SLES)

Acute and chronic stressful life events were evaluated using the SLES (Williamson et al., 2003). The SLES is comprises a 78-item questionnaire originally designed to determine the occurrence of specific stressful life events within the previous 12 months as they relate to
psychopathology onset. The SLES in the current study was modified to cover the child’s entire life; this extended the original design, which was originally limited to the previous 12 months. It was also formatted in such a way that allowed for multiple occurrences of the same event over the lifespan. These changes provided the information necessary to complete a life chart for each child. The current study utilised a version of the SLES, designed to be administered to parents, which assessed stressful occurrences for children and adolescents aged 8-18 years (Williamson et al., 2003, see Appendix 7.4). Events could be perceived as either a negative or positive experience: for example, ‘… parent expecting a baby’. In such instances, the child’s perception of these events was discussed with the parent.

The month and year of each confirmed event was ascertained as precisely as possible, along with the parent’s perception of the degree to which the event adversely effected their child. A four-point Likert scale, (where ‘0’ indicates ‘not at all’, ‘1’ indicates ‘a little’, ‘2’ indicates ‘somewhat’, and ‘3’ indicates ‘a lot’) was also used to evaluate perceived threat (Williamson, 2005). Following the interview, each event was discussed by the PhD Candidate and principal supervisor in terms of the “amount of stress or unpleasantness…that an average person, given the subject’s biographical circumstances, [w]ould be expected to experience” (Williamson, 2005, p. 12).

The SLES has demonstrated substantial inter-rater reliability concerning objective threat (κ = .67), behavioural dependence (κ = .84), and focus (κ = .93) (Williamson et. al., 2003). In addition, the SLES has demonstrated good psychometric properties, including discriminant validity (demonstrated by discriminating between children with and without psychopathology), and concurrent validity (demonstrated by good agreement with the Life Events and Difficulties Schedule, which are other measures of environmental stresses) (Williamson, et. al., 2003).
7.2.4 Procedure

A trained clinical interviewer (the PhD Candidate) conducted the PA interviews. In situations where face-to-face interviewing was possible, and was preferred by the participant, interviews were arranged to be on-campus or another location convenient to all parties. When geographic restraints prevented face-to-face interviewing, or when not preferred, interviews were conducted via telephone. Risks to the clinical interviewer while conducting face-to-face interviews within a participant’s home were minimised using several strategies: providing a member of staff (remaining on campus) with the details of the interview including address, time, and expected completion time, as well as ‘checking-in and checking-out’ of the interview (see Appendix 7.5). Half of the interviews were conducted via the telephone. The remaining half were conducted face-to-face; four within the participant’s home and two at the University campus.

Each interview was audio-recorded with the permission of the informant. One informant declined this and extensive notes were taken during and after the interview. Potentially, this was because the informant was engaging in maladaptive (illicit) coping mechanisms since the death of the informant’s child. Each audio-recording was then transcribed verbatim by a professional transcription service, Pacific Transcripts. To ensure anonymity, children and their parents were assigned a code: letters and a number (indicating the order the interview was conducted).

SUI – Suicide case;

EXT – External cause of death case.

Interviews lasted between 104 minutes and 360 minutes, resulting in a total of 42 hours and 18 minutes of interview data (a total of 26 hours and 8 mins for suicide cases and
16 hours and 10 minutes for OEC). Information was supplemented and cross-referenced with the QSR (for suicide cases) and the CDR (for both suicide and cases of OEC). In this way, the CDR and QSR provide a means of triangulation and testimonial validity (Barker, Pistrang, & Elliott, 2002). The CDR and QSR were described in greater detail in Sections 4.3.1 and 4.3.2, respectively.

7.2.4.1 Recruitment

7.2.4.1.1 Suicide group

Informants for the suicide group were identified using the QSR, which contains next of kin (NOK) contact details at time of death along with permission to be contacted. The Australian Institute for Suicide Research and Prevention (AISRAP) keeps these details on file for research purposes. Whether a NOK consents to be contacted for research purposes is ascertained by attending Queensland Police Service (QPS) officers at time of death and recorded on Police Report of Death to a Coroner (Form 1; Coroner Act, 2003; De Leo et al., 2013). A minimum of six months was required to have passed from time of death to contact. This was done to try to allow for an appropriate period of acute grieving time for the bereaved. This ‘no contact’ timeframe is twice as long as previous studies (for example, Séguin et al., 2011).

A letter (see Appendix 7.6) introducing the study, information sheet (see Appendix 7.7), and consent form (see Appendix 7.8), were sent to participants. For participants in the suicide group, this information package was followed up with a phone call approximately two weeks later to invite them to participate and arrange a time and place for the interview. On receipt of the information package, if an individual from the suicide group was willing to participate in the study, no further action was required of them until the PhD
Candidate called to answer any further questions they may have had, to obtain verbal consent to participate, and to arrange a time for the interview. The possibility that the information package could be lost in the mail is acknowledged here; however, a passive rather than active consent was deemed appropriate as participant’s verbal consent to be contacted by AISRAP for research purposes had already been given to QPS at time of death via an Authorisation Form. The Authorisation Form is a form completed by QPS where the NOK (at the time of their relative's passing) has an opportunity to consent (or decline) to being contacted by AISRAP for research purposes in the future. If an individual did not want to participate (and did not want to receive a phone call), they were invited to email or call (leaving a message outside of business hours if they wished) to stipulate this. Figure 7.2 displays the recruitment and associated numbers for the suicide group.

As can be seen in Figure 7.2, there were a small number of cases where the Authorisation Form was missing. In these circumstances, an active form of consent was employed. The Office of the State Coroner (OSC) sent letters introducing the study and inviting participation to those without Authorisation Forms (i.e., an active consent approach similar to that of the comparison group, see Section 7.2.4.1.2). When participants were not contactable by telephone, an additional letter was sent to them outlining the difficulties in reaching them and inviting them to contact the researcher or return an enclosed consent form with their updated contact information.
As demonstrated in Chapter 6, Aboriginal and Torres Strait Islander children continue to represent an elevated risk of suicide compared to other Australian children. As previously stated, the QSR records four categories of ethnicity: Caucasian, Aboriginal/Torres Strait Islander, Asian, and other/unknown. As the QSR does not distinguish between Aboriginal and Torres Strait Islander ethnicity, the term Indigenous is employed. Table 7.1 depicts the number of suicide cases in relation of ethnicity as a function of recruitment. Due to the active form of consent, it was not possible to ascertain the ethnicity of children within the comparison group whose parents did not participate in a PA interview.
Table 7.1 Recruitment of suicide group as a function of ethnicity

<table>
<thead>
<tr>
<th>Authorisation not given</th>
<th>Missing Authorisation Form</th>
<th>Listed NOK not Biological Parents</th>
<th>Not Contactable</th>
<th>Declined Interview</th>
<th>Consented to Interview: Unable to Conduct Interview</th>
<th>Consented to Interview: Interview Conducted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Indigenous</td>
<td>10</td>
<td>47.62%</td>
<td>2</td>
<td>9.52%</td>
<td>1 4.76%</td>
<td>4 19.05%</td>
<td>1 4.76%</td>
</tr>
<tr>
<td>Non-Indigenous*</td>
<td>9</td>
<td>25.71%</td>
<td>6</td>
<td>17.14%</td>
<td>2 5.71%</td>
<td>9 25.71%</td>
<td>3 8.57%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>25.00%</td>
<td>0</td>
<td>0.00%</td>
<td>1 25.00%</td>
<td>2 50.00%</td>
<td>0 0.00%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>33.33%</td>
<td>8</td>
<td>13.33%</td>
<td>4 6.67%</td>
<td>15 25.00%</td>
<td>4 6.67%</td>
</tr>
</tbody>
</table>

*Includes ‘unknown’ and ‘unknown but not Indigenous’
As can be seen in Table 7.1, almost half of the NOK connected to the Indigenous cases (47.62%) declined to be contacted for research purposes at time of death, greatly diminishing the probability of obtaining interviews with these parents regarding their children. Table 7.1 also shows three occurrences where a parent consented to an interview but the interview did not go ahead. In one instance, a parent completed the first part of the interview but there was difficulty in arranging the second session to complete the interview; this was deemed to be a withdrawal from the study on the participant’s part. The other two instances involved parents of Indigenous children: in one instance, there was difficulty in contacting the parent to arrange a time; and, in the second instance, there was difficulty conducting the interview via telephone.

7.2.4.1.2 Other External Causes of Death group

Informants for the comparison group were identified, and initially recruited, by the Office of State Coroner (OSC). For cases of OEC, a more active form of consent was utilised. In all cases, a letter (Appendix 7.9) introducing the study, an information sheet (Appendix 7.10), and a consent form (Appendix 7.11) were sent to participants. This information package was sent on behalf of AISRAP by the OSC to potential participants fitting the parameters of the study. Contact details of participants were released to AISRAP in the form of the consent form being returned. On receipt of the consent form, the PhD Candidate called and answered any further questions participants may have and arranged the interview.

There were 88 cases of external causes of death on the initial OSC recruitment list. Twenty cases were immediately eliminated; the children were either younger than 10 years of age, older than 15 years of age, or the cause of death was suicide (intentional self-harm X60-X84). Of the remaining 68 potential participants, some letters were not sent as: the family now lived overseas (5 cases); the NOK listed was not a biological parent (4 cases);
information on Form 1 was inadequate/illegible (6 cases); the NOK’s address had changed and was now unknown (4 cases); and, the sole surviving member of the child’s family was also a minor (1 case). In total, 48 letters and information packages were sent (personal communication, 2013).

7.2.4.1.3 Additional recruitment methods

Advertising through bereavement support groups was also implemented for the current study. A list of bereavement support groups in the Brisbane and greater Brisbane area that provided services to individuals who had lost someone through suicide or sudden unexpected death was created. These various bereavement support groups were approached to display the existing approved information sheets of the study (Appendix 7.12), and place a study announcement (Appendix 7.13) in publications to their respective members. A total of 23 bereavement groups were approached. This recruitment strategy was not based on an a priori decision. Rather, this recruitment strategy was implemented in response to poor response rates associated with the aforementioned recruitment protocols of parents of children who died by suicide and other external causes of death. However, while bereavement groups were positive, only one participant was identified in this way (see Figure 7.2).

7.2.5 Data analysis

This study consisted of two stages of data collection – PA interviews with parents of children who died by suicide or OEC and deriving information [and cross-referencing data] within two databases, the QSR and CDR. Audio-files were subsequently transcribed. Overall, data analysis consisted of thematic analysis of transcripts, collaboration with a panel of psychiatrists, scoring CBCL results, and creating life charts.
The thematic analysis of transcripts consisted of several stages as outlined by Braun and Clarke (2006): data familiarisation through initial reading and listening (and re-reading and re-listening) of transcripts; preliminary code identification; analysis of codes into overarching themes; review of themes in terms of internal and external validity; and, finally, deliberation on defining and naming themes. As stipulated in Section 4.2.2.1, each case was discussed in-depth with a panel of psychiatrists. During this consultation, any mental health difficulties preliminarily identified by the MINI were discussed within the context of the child’s family, social, and educational life. This was to determine whether the identified issue was normative rather than pathological. Differing opinions were discussed until a consensus and final decision was reached. CBCL results of each child were hand scored individually using paper hand-scored profiles. Specifically, total and T-scores (normative sample – 6-18 years) were calculated for social and competency scales, narrow-band scale, broad-band scale, and DSM-orientated scale for each child. On the Activities, Social, and School scales, T-scores of 31 to 35 and below 31 are considered within the borderline and clinical range respectively. Total Competence T-scores of 37 to 40 are considered borderline and below 37 are in the clinical range. For the syndrome and DSM-orientated scales, T scores ranging from 65 to 69 are considered borderline while clinical range are T scores of 70 and above. For Total Problems, Internalising and Externalising, T scores 60 to 63 are considered within the borderline range and T scores of 64 and greater are in the clinical range (Achenbach & Rescorla, 2001).

In order to create the life charts and follow the life stories and suicidal processes among children, an iterative qualitative approach (Strauss, 1987) – where the PhD Candidate and principal supervisor discussed each case in-depth – was used to identify general themes in order to produce a life chart for each child (Sharpe, 1992). In this way, collaboration with the primary supervisor in the construction of life charts provided an analytical auditing of
sorts (Barker et al., 2002). Information used to identify occurring themes was primarily derived from the SLES; however, significant events derived from the PA interview in its entirety, as well as QSR and CDR data, were also included. Guided by the life chart template created for adolescent suicides by Fortune and colleagues (2007), and the factors previously linked with child suicide through the systematic literature review (see Section 3.5), the life chart template included 13 possible categories in total. These were: attachment; relationships; social circumstances; school and education; financial (extending to that of the child’s family); forensic/legal; drug and alcohol use; health; psychiatric difficulties; contact with services (including contact with child safety services); previous suicidality (including self-harm, attempts and communications of intent) and exposure to suicidal behaviour; and, ‘other relevant information’ which included pertinent comments regarding the child’s personality and temperament. The data collection and analysis process of Component Three (Part One) is represented diagrammatically in Figure 7.3.
Figure 7.3. Data collection and analysis process of Component Three, Part 1: PA study
Data is first presented regarding intergroup differences (that is, the suicide group is compared with OEC). Factors chosen for comparison were derived from the quantitative findings of Components One and Two (see Chapters 5 and 6 respectively), and within the context of relevant literature (see Section 3.5). Capabilities and problem behaviours derived from the CBCL results of children who died by suicide compared to other causes of death are then graphically presented and discussed.

Individual case studies are presented using the following format:

1) Demographic information pertaining to case (age, gender, cause of death) and interval of time between death and interview;
2) Narrative vignette of child’s life including:
   a) Findings of MINI-KID and collaboration of psychiatric panel including speculated final diagnosis (if any);
   b) CBCL narrative; and,
3) Life chart of biological and psychosocial events derived from SLES.

It is important for researchers within a qualitative research paradigm to ‘position’ themselves in their writing (Creswell, 2012; Malterud, 2001). This concept, termed ‘reflexivity’, involves the identification and continued mindfulness of bias, values, and experiences the researcher themselves brings with them to the study (Creswell, 2012; Malterud, 2001). In this way, antithetical to the nomothetic research paradigm approach to knowledge in which the researcher is advocated as an impartial observer, the role of the researcher is acknowledged as an important concept in idiographic (qualitative) research (Creswell, 2012; Henwood & Pidgeon, 1992; Malterud, 2001). As Malterud (2001) states:

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5 While t-tests would be an appropriate statistical test to detect differences between CBCL scores of children who died by suicide and children who died by other external causes, this was considered inappropriate due to small samples sizes increasing the likelihood that parametric assumptions would not be met (Field, 2006).
“different researchers might therefore access different, although equally valid, representations of the situation that is studied…[and] these different ways of approaching the same subject result in an increased understanding of complex phenomena, not in a failure of reliability” (p. 484). ‘Bracketing’ is the process of attempting to rescind any existing preconceptions and personal beliefs and feelings when conducting research and during data interpretation to ensure the authentic voice of participant’s is maintained and their experiences are not appropriated or exploited (Barker et al., 2002).

Lourie (1966) discussed the cultural implications of adults’ tendencies to underestimate the intensity of children’s emotions and seriousness of suicidal behaviour or expression. An adult’s perception of life events is arguably very different to the perception of a child. Indeed, Hug-Hellmuth stated; “no event among the abundant phenomena of human life is insignificant for the child” (1912/1965, p. 499). This notion was eloquently expressed by Orbach (1988), who wrote: “one’s life situation is a matter not of purely objective measurements but of subjective impressions. Therefore, we must look at children’s experiences through their eyes” (p. 68). The following analysis of the children examined on an idiographic level aimed to ground events and experiences through that of the individual child rather than through the adult lens of the researcher. Reflexive bracketing remained in the forefront of analysis and discussion. Here, children’s experiences were continually grounded within the context of their life and developmental stage, rather than through the context and perception of an adult (Ahern, 1999).

7.3 Results

Between 2011 and 2014, 12 interviews were conducted with parents whose child had died during the time period 2005 to 2012 by external causes of death (Chapter XX of ICD-10). Of the 12 children included in the study, six children died by intentional self-harm (X60-
X84); three children died in transport accidents (V01-V99); one child died by accidental drowning and submersion (W65-W74); one child died by fatal assault (X85-Y09); and, one child died by event[s] of undetermined intent (Y10-Y34).

7.3.1 Comparison of suicides and other external causes of deaths

Overall, the mean age of the children was 14.90 years ($SD = 1.37$, range: 11-15 years). In the suicide group, the mean age of the children was 13.95 ($SD = 1.57$, range: 11-15 years), while the mean age of the OEC group was slightly higher at 14.84 years ($SD = 1.10$, range: 12-15 years). The sample consisted of 4 females (33.3%; 3 who died by suicide and 1 by other causes), and 8 males (66.6%; 3 who died by suicide and 5 by other causes). Children were predominately Caucasian; with only one child identified as Aboriginal or Torres Strait Islander.

Rarely can a death by suicide be attributed to a single reason; rather suicide is a complex and multifaceted behaviour (van Heeringen, Hawton, & Williams, 2000).

Accordingly, Table 7.2 illustrates the multifarious interaction of factors identified for each child whose parents participated in the PA interview. The quantitative analysis presented in Chapter 5 showed that gender asymmetry is less pronounced in children (10-14 years) who die by suicide, compared to adolescents (15-17 years) who die by suicide. In addition, the number of suicides increased with age (see Section 5.5.1). Thus, Table 7.2 presents cases by cause of death and in ascending age.
Table 7.2. Characteristics of children who died by suicide and children who died by other external causes

<table>
<thead>
<tr>
<th>Death type</th>
<th>Suicide</th>
<th>Other External Causes of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sui_002</td>
<td>Sui_005</td>
</tr>
<tr>
<td>DEMOGRAPHICS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Gender</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Indigenous</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>ACCESSIBILITY AND REMOTENESS (ARIA+)²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Regional</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Remote</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SOCIO-ECONOMIC INDEXES FOR AREAS (SEIFA)³</td>
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</tr>
<tr>
<td>Low or very low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High or very high</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>LIVING ARRANGEMENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental divorce/Non-intact family</td>
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<td>X</td>
</tr>
<tr>
<td>Not living with parents</td>
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<td></td>
</tr>
<tr>
<td>CHILD PROTECTION SYSTEM</td>
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<tr>
<td>Known to child protection system⁴</td>
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<td></td>
</tr>
<tr>
<td>Siblings known to child protection system⁵</td>
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<td></td>
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<tr>
<td>MENTAL HEALTH AND WELLBEING</td>
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<td>Mental Health Difficulties⁶</td>
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<td>X</td>
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<tr>
<td>Prescribed Psychopharmacology</td>
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<tr>
<td>Psychopathology⁷</td>
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<tr>
<td>Preoccupation with death</td>
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<td>X</td>
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<tr>
<td>Family psychopathology⁸</td>
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<tr>
<td>EXPOSURE TO SUICIDALITY</td>
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<tr>
<td>Familial exposure</td>
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<td>Sui_005</td>
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<tr>
<td>-----------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Imitative exposure</td>
<td>X</td>
<td></td>
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<tr>
<td>Internet</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Music</td>
<td>X</td>
<td>X</td>
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<tr>
<td>INTENT</td>
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</tr>
<tr>
<td>Implied statement of intent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During lifetime</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>During 12 months prior</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Explicit statement of intent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During lifetime</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During 12 months prior</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PRIOR SUICIDALITY</td>
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<td></td>
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<tr>
<td>Ideation</td>
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<td>X</td>
</tr>
<tr>
<td>DSH</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Suicide attempt</td>
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<td>?</td>
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<tr>
<td>ALCOHOL AND DRUG USE</td>
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<td></td>
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<tr>
<td>Alcohol/Drug consumption prior to death²</td>
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<tr>
<td>Problems with drug and alcohol in lifetime</td>
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<td></td>
</tr>
<tr>
<td>History of abuse¹⁰</td>
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<tr>
<td>Detrimental home environment¹¹</td>
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<td>STRESSFUL LIFE EVENTS</td>
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<td>Childhood Trauma Identified</td>
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<td></td>
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<tr>
<td>Bereavement or significant loss</td>
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<td></td>
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<tr>
<td>Familial Conflict Identified</td>
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<td>Poor parent-child communication</td>
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<tr>
<td>Parent-child conflict</td>
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<tr>
<td>Interpersonal Conflict Identified</td>
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<td></td>
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<tr>
<td>Romantic Relationship Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education/School Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullying¹²</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Absence from school</td>
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<td></td>
</tr>
<tr>
<td>Case code</td>
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<td>Sui_005</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>School performance/behavioural problems</td>
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<td>X</td>
</tr>
<tr>
<td>Legal Issues/Alleged Offending Identified</td>
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<tr>
<td>Financial Problems Identified</td>
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<td>Homelessness/Unstable Accommodation</td>
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<tr>
<td>Transition&lt;sup&gt;11&lt;/sup&gt;</td>
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<tr>
<td>PRECIPITATING INCIDENT&lt;sup&gt;14&lt;/sup&gt;</td>
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<td>Childhood Trauma Identified</td>
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<td>Bereavement or significant loss</td>
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<td>Familial Conflict Identified</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Legal Issues/Alleged Offending Identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Problems Identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homelessness/Unstable Accommodation</td>
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<td></td>
</tr>
<tr>
<td>Transition&lt;sup&gt;11&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SERVICES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help seeking prior to death</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gun kept within home</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data Source: Psychological autopsy (PA) interview conducted with parent, Queensland Suicide Register, Child Death Register.
X indicates risk factor identified for child based on aforementioned data sources.
X? indicates risk factor potentially present however not definitive based on aforementioned data sources.

Notes:
1. Indigenous: child identified as Aboriginal or Torres Strait Islander decent
2. ARIA+: Accessibility Remoteness Indexes for Areas
3. SEIFA: Socio-Economic Indexes for Areas
4. Known to child protection system: refers to cases where child was known to system in 3 years prior to death
5. Siblings known to child protection system: refers to cases where siblings of deceased child was known to system in 3 years prior to death
6. Mental Health Difficulties: refers to cases where parents indicated that deceased child experienced mental health difficulties before death
7. Psychopathology: refers to cases where available information identifies the child as clinically diagnosed or reasonable conjecture of mental health difficulties
8. Family psychopathology: clinically diagnosed or reasonable conjecture within immediate and extended family
9. Alcohol consumption prior to suicide: based on toxicology report
10. History of abuse: refers to cases where available information identifies the child as having experienced a history of physical, sexual or emotional abuse or neglect prior to death
11. Detrimental home environment: includes domestic violence
12. Bullying: includes physical, verbal, covert and cyber-bullying
13. Transition: include events such as primary school to high school, or high school to employment/tertiary education/unemployment, changing schools, moving interstate or a distance from home, and also changing primary caregivers such as changes in foster care
14. Precipitating event occurred within 6 months prior to death
Upon visual inspection of Table 7.2 above, it can be observed that several factors frequently identified in cases involving children who died by suicide were not present in cases of those who died by OEC. Mental health difficulties were often suspected or observed by parents whose child died by suicide. However, after consideration of all available evidence, and in consultation with the panel of psychiatrists, the number of children with a clinically diagnosed or reasonable conjecture of a mental illness diagnosis was smaller. Children who died by suicide were observed as having had an increased interest and/or preoccupation with death in general (and sometimes suicide more specifically) prior to death through various forms of media. Furthermore, suicidal intent was often communicated, both implicitly and explicitly, prior to the child’s death. Adverse life events were more commonly identified in cases of children whose deaths were due to suicide – often these children were often dealing with multiple stressors. This occurred for both precipitating stressors and events during their lifetime, which can be viewed as more chronic and enduring. Exposure to suicidal behaviour within a child’s family or peer network was identified in cases of both suicides and other external causes of death.

7.3.1.1 CBCL results: Group comparisons

7.3.1.1.1 Competence Scales

There was greater variation in academic engagement and social competencies reported by parents whose child died by suicide compared to those whose child died by OEC (see Figure 7.4 and 7.5). Specifically, children who died by suicide were often reported to enjoy fewer sports and hobbies, and engage in fewer organisations or participate in smaller social groups. However, it is pertinent to note here that the academic and social engagement reported by one parent whose child died by suicide is likely a reflection of the child during
their formative years rather than an accurate description of the child prior to and leading up to their death.

![Figure 7.4. CBCL/6-18 - Competence Scale Scores for children who died by other external causes of death.](image)

<table>
<thead>
<tr>
<th>Activity</th>
<th>EXT-001</th>
<th>EXT-002</th>
<th>EXT-003</th>
<th>EXT-004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Social</td>
<td></td>
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</tr>
<tr>
<td>School</td>
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<td>Total</td>
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<tr>
<td>T-Score EXT-001</td>
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<td>T-Score EXT-002</td>
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<td>T-Score EXT-003</td>
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<tr>
<td>T-Score EXT-004</td>
<td></td>
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</tbody>
</table>

Figure 7.4. CBCL/6-18 - Competence Scale Scores for children who died by other external causes of death.
7.3.1.1.2 Narrow-band Scales

With the exception of one case, all cases of OEC were within the normal range for: anxious/depressed; withdrawn/depressed; somatic complaints; social problems; thought problems; attention problems; rule-breaking behaviour; and, aggressive behaviour (see Figure 7.6). The one case that deviated scored within the borderline clinical ranges for social problems, attention problems, and aggressive behaviour, as well as within the clinical range for rule-breaking behaviour.
Figure 7.6. CBCL/6-18 - Syndrome scales for children who died by other external causes of death: Scored using T scores for Australia

In contrast, most children who died by suicide had scores within either the borderline or clinical ranges, for at least one of the eight narrow-band scales. In particular, these children struggled with several behavioural, social, and emotional problems, specifically those falling within the withdrawn/depressed, thought problems, anxious/depressed, and rule-breaking behaviour scales. Pertinent to note, one suicide case scored within the normal range for all scales (see Figure 7.7). These results indicate that parents of children who died by suicide (excluding one case) reported more problems than were typically reported by parents of children who died by OEC within this study.
Figure 7.7. CBCL/6-18 - Syndrome scale scores for children who died by suicide: Scored using T scores for Australia

7.3.1.1.3 Internalising, Externalising, and Total Problems

With the exception of one case, scores on the CBCL’s internalising, externalising, and total problem scales were within the normal range for children who died by OEC (see Figure 7.8). These results indicate that parents of children who died by OEC (excluding one case) reported fewer problems than were typically reported by parents whose children died by suicide. The one case that did score outside the normal ranges on the board-band scales scored within the clinical range for externalising problems but remained within the normal range for internalising behaviour. This indicates under-controlled, excess, or acting-out problem behaviours; for example, rule breaking, truancy, disobedience at school, and aggression, such as fighting or temper.
Conversely, parents whose children died by suicide reported borderline and clinical range scores on the CBCL’s internalising, externalising, and total problem scales (see Figure 7.9). In particular, compared to children who died by OEC, children who died by suicide were reported to have higher internalising scores. Internalising behavioural problems involve over-controlled behaviour and indicate higher scores on the anxious/depressed, withdrawn/depressed, and somatic complaints narrow-band scales. Externalising problem scores were also within both borderline-clinical ranges and clinical ranges for some children who died by suicide. Externalising behavioural problems involve under-controlled or acting-out behaviours and indicate higher scores on rule-breaking and aggressive behaviour.
Overall, total problems reported by parents were also higher by parents whose child died by suicide than those who died from OEC within this study.

*Figure 7.9. CBCL/6-18 - Internalising, externalising and total problems for children who died by suicide: Scored using T scores for Australia.*

### 7.3.1.1.4 DSM-Orientated Scales

Four of the six children who died by OEC scored within the normal range on the DSM-Orientated scales; two did not. One case scored within the borderline-clinical range for Attention Deficit/Hyperactivity Problems. In addition, another case, which was also the exception mentioned previously, scored within the borderline-clinical range on the Oppositional Defiant Problems scale and within the clinical ranges on the Attention Deficit/Hyperactivity and Conduct Problems scale (see Figure 7.10). These results indicate
that these two cases should be further assessed to determine if these children would meet the
diagnostic criteria for disorders characterised by problems contained within those scales.

![Figure 7.10. CBCL/6-18 - DSM-Orientated scales for children who died by other external
causes of death: Scored using T scores for Australia](image)

With the exception of one suicide case, which scored within the normal ranges for all
six DSM-Orientated scales, the other five all scored within the borderline or clinical ranges
for Affective Problems. Higher scores on the Affective Problems scales indicate the potential
presence of mood disorders, such as depression. Children who died by suicide also scored
within the borderline or clinical ranges for Anxiety Problems, Somatic Problems, Attention
Deficit/Hyperactivity Problems, and Conduct Problems (see Figure 7.11).
Figure 7.11. CBCL/6-18 - DSM-Orientated scales for children who died by suicide: Scored using T scores for Australia.

7.3.2 Individual case studies

The case studies of each child who died by suicide, presented below, serve to illustrate the ways the risk factors explored within the quantitative data analysis (see Chapters 5 and 6) plausibly influenced the suicidal processes of children at an idiographic level. As stipulated in Section 4.2.1.3, it was intended that the narratives derived from the PA interviews be presented in such a way that informants would be able to recognise their stories and their child, while remaining anonymous to all other readers (Barnes, 1979).
7.3.2.1 Case Study I

The male child was close to 14 years and 9 months old when he took his own life by means of hanging in his bedroom closet of the family home. A face-to-face PA interview was conducted with his father two years and one month after the child’s death. By choice of the informant, his wife (the child’s stepmother) was also present during the interview.

At the time of death, the child lived with his biological father, stepmother, biological younger brother, and two older stepsisters. The child’s biological mother had been fitted with a pacemaker after experiencing health difficulties. At age 7, the child witnessed the collapse of his mother, who subsequently died from heart failure. The child was described as having had a ‘close’ relationship with his mother and was described as ‘still angry… angry at God’ about her death 8 years later.

Three years after his mother’s passing, his father began a new relationship; one year after this, his father’s partner and her two children from a previous relationship moved into the family home. During the child’s fourteenth year, his father and stepmother married. This proved to be a difficult time for the child who exhibited difficulty adjusting. His father described his relationship with his son as ‘reasonable’, and described him as having a typical ‘rough and tumble’ relationship with his younger brother. His relationship with his stepmother was described as ‘instructional’ where his stepmother would act as a ‘guide to correct [his] behaviours’. Although described as being close with his stepsisters, they ‘had some difficulty understanding some of his behaviours’.

Attention and concentration difficulties were first observed when the decedent was 5 years old. Eventually this, as well as behavioural difficulties, physical movements, and verbal utterances or ‘tics’, led to his father and stepmother seeking help from a GP; however, this
did not occur until the decedent was 13 years old. The child was referred to a child
developmental paediatrician whose diagnosis suggested the decedent might have mild
Attention Deficit and Hyperactivity Disorder (ADHD), although no medication was
prescribed. His father and stepmother also expressed suspicion of Asperger’s given his
difficulties with social interaction. At this time, his parents also engaged in parenting
interventions/skills to help manage the child’s behaviour.

On the CBCL problem scales, the child’s total problems were within the clinical range
and his internalising problems scores were within the borderline-clinical range for boys aged
12-18 years. His scores on the Withdrawn/Depressed and Attention Problems syndromes
were in the borderline-clinical range and his scores on the Social Problems and Thought
Problem syndromes were within the clinical range. On the DSM-Orientated scales, his score
for Anxiety Problems was within the clinical range and his score for the Attention
Deficit/Hyperactivity Problems was within the borderline-clinical range.

Findings from the MINI and consultation with panel of psychiatrists indicated that the
child likely met the criteria for Tic Disorder, specifically Tourette’s syndrome, as
characterised by his by multiple physical (motor) tics and at least one vocal (phonic) tic (4th
ed.; DSM–IV; American Psychiatric Association, 2000). In addition, there was some
evidence to indicate the child experienced some symptoms of anxiety, which would interfere
with his academic and social functioning; for example, marked nervousness associated with
catching the bus. Indeed, rather than being indicative of ADHD, it appears more likely that
these behaviours were more symptomatic of anxiety.

At time of death, the decedent had completed Year 9 and was currently on school
holidays. The decedent had expressed to his parents that he was not keen on going back to
school. He had previously experienced difficulties with his schoolwork and subsequent
grades that had led his father and stepmother to discuss his behaviour with teachers. However, indications from the parents’ perspectives were that the decedent had become ‘more socially appropriate’ and, in the months prior to his death, there were no major issues with his behaviour. There was a noticeable improvement in his schoolwork, general behaviour, and personal hygiene. Coronial investigations following the child’s death found a message which read that he was ‘bored during school holidays but it was 10 times better than school’. This was considered ‘relatively common and not indicative of concern’.

Although he had a tendency to spend time alone, the decedent enjoyed a close group of friends whom he would regularly spend time with outside of school hours. He was affectionately nicknamed ‘Twitchy’ by his friends due to the aforementioned tics. However, the child also endured bullying of a verbal, and sometimes physical, nature from other children because of this and due to ‘being different’. Generally, he would react to these incidents with anger.

Prior to death, there were some rumours of an ‘asphyxiation game at school’; however, these were not substantiated. In addition, when the child was approximately 12 years old, a friend, who was described as a ‘troubled soul’, had run away claiming issues at home; the decedent’s father and stepmother speculated there may have been some exposure to DSH by this friend. While there was no evidence of DSH around the time of death, his parents had found a cord hanging in his room cupboard (the location in which he was found). While they did not think much of this at the time, in retrospect they were not sure if this represented a previous suicide attempt. The child had also asked his stepmother: ‘would you miss me if I died?’ While he had always been artistic, around the time of his death, he had begun to write stories and poems with ‘themes of death’ and ‘passing into the next realm’. He had become interested in music his parents described as ‘dark and angry’.
His father described the morning the day his son died as ‘routine’. His stepmother left for work at 7am and his father left at 11am. The decedent and his younger brother had what was described as a ‘minor argument’, which was considered to be ‘insignificant’. The decedent, along with his two stepsisters, stayed home while their parents went to work; his younger brother went out with friends during the day returning at 4pm. The decedent went out briefly (one hour) with friends before returning around noon. Despite his sisters being home, his friends were the last to see him alive. His sisters did not see him on his return; however, this was not considered unusual as he often spent time alone in his room. His father returned home from work around 5pm and observed that his son’s bedroom door was closed and there was no answer when calling out to his son. The child’s stepmother returned home from work soon after and the family commenced dinner preparations. The child’s father then checked and found the decedent’s room door locked from the inside and no answer from his son. The decision to break down the door was reached and they found no sign of the child within his room. At approximately 7pm, and becoming increasingly concerned about their child being out after dark, his father re-entered the room. This time, he searched within the closet where he located his son. The Queensland Ambulance Service (QAS) responded; however, paramedics did not treat the child, as there were nil signs of life.
**Figure 7.12. Life chart representation of Case Study I**

| Age | Prior to birth | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
|-----|----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Attachment | | | | | | | | | | | | | | | | |
| Relationships | | | | | | | | | | | | | | | | |
| Social circumstances | | | | | | | | | | | | | | | | |
| School and Education | | | | | | | | | | | | | | | | |
| Financial events | | | | | | | | | | | | | | | | |
| Forensic/Legal | | | | | | | | | | | | | | | | |
| Drug and Alcohol | | | | | | | | | | | | | | | | |
| Health | | | | | | | | | | | | | | | | |
| Psychiatric difficulties | | | | | | | | | | | | | | | | |
| Contact with services | | | | | | | | | | | | | | | | |
| Suicidality | | | | | | | | | | | | | | | | |
| Exposure | | | | | | | | | | | | | | | | |
| Other relevant information | | | | | | | | | | | | | | | | |
| Death of Mo (heart failure) | △ | Grief | △ | Small group of close friends | △ New relationship for Fa | △ Fa remarried | △ Relationship with Step-Mo critical | △ Moved house, Step-Mo and step sisters moved in | △ Improvements in school and hygiene | Falling grades | △ | Asphyxiation game at school | △ | GP referral to Paed - diagnosed w/ Mild ADHD, no medication | △ | Parenting skills intervention | △ | Poems and stories with death themes, questions about death, interest in dark music about death | △ | Potential DSH by friend | △ | Cord found in cupboard | △ |
7.3.2.2 Case Study II

The female child was an Aboriginal and Torres Strait Islander who was 11 years and five months old when she took her own life by means of hanging in the bathroom of the family home. Four years and seven months after her death, a PA interview was conducted with her father over the telephone.

At the time of her death, the child lived with her biological father and an older biological brother. Her biological parents separated when she was two years old. Since then, her primary carer had been her father who described his relationship with his ‘baby girl’ as very close with frequent quality time spent together. Despite only seeing her mother during school holidays, due to distance, the decedent’s father described the mother-child relationship as ‘very close’. The child also had one older half-brother and two younger half-sisters.

When the child was approximately 9 years old, her father began a new relationship and his partner moved in soon after. Around this time, the partner’s middle-aged nephew also began living in the family home. Shortly after, the father recalled that his daughter became frightened of the dark and would sometimes want to sleep in the same room as him or would want a night-light. When the child was approximately 11 years old, her father’s de facto relationship ended. Posthumously, abuse of a sexual nature perpetrated by this nephew toward the child was discovered. The father expressed his belief that this was the primary reason for his daughter’s suicide.

Prior to her death, the child was a grade six student who ‘loved school’ and excelled academically. However, she was a victim of bullying which predominately occurred during recess. She was called names, excluded by others, and the subject of rumours. Her father also
became aware after her death of a bullying incident where a boy had told the decedent: ‘why don’t you go home and hang yourself?’

Although the child had given some possessions away before her death, the father maintained she was ‘always giving things away… not out of character’. The deceased had no prior history of self-harm or any suicide attempts – her death ‘took everyone by surprise’. On the CBCL problem scales, her Total Problems, Internalising, and Externalising scores were all in the normal range for girls aged 6 to 11 years. Her scores on the eight narrow-band syndrome scales and DSM-Orientated scales were all within normal range. Findings from the MINI and psychiatrist panel indicated the possibility of Post-Traumatic Stress Disorder (PTSD) as a consequence of the sexual abuse; however, this was speculative.

Two days prior to her death, the decedent had taken a necklace belonging to a family friend and given it to a friend at school. Another child at school (the daughter of the necklace owner) took the necklace and informed her mother. On the afternoon of her death, the owner of the necklace spoke to her; she became upset after admitting to having taken the necklace. Her father informed her she was grounded as a consequence of this.

In the early evening on the day of her death, the decedent was told it was time for her evening shower. Her father and brother became concerned upon hearing a noise in the bathroom and used a knife to open the bathroom door lock. Upon entering, they found the child hanging from the shower rail. She was cut down and her father commenced CPR while her brother contacted QAS. The child was transported to hospital where she was later pronounced deceased.
**Figure 7.13.** Life chart representation of Case Study II

<table>
<thead>
<tr>
<th>Age</th>
<th>Prior to birth</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>
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<tbody>
<tr>
<td></td>
<td>Δ Parent separated</td>
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<tr>
<td></td>
<td>Lived with Fa</td>
<td>Δ Birth of (M) sibling</td>
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<tr>
<td></td>
<td>Δ Fa's Partner's nephew (X; 40 years old) moves in</td>
<td>Δ Fa moves in with partner.</td>
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<tr>
<td></td>
<td>Δ New relationship for Mo</td>
<td>Δ New relationship for Fa</td>
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<td>Δ Fa relationship</td>
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<td>Δ Changed school</td>
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<td>Performed well/academically active</td>
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<tr>
<td></td>
<td>Told by young boy at school &quot;go hang yourself&quot;</td>
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<tr>
<td></td>
<td>Sexual abuse by X (discovered posthumously)</td>
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<tr>
<td></td>
<td>Afraid of dark. Sleeping with night light or wanting to sleep in same room as Fa</td>
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</table>
7.3.2.3 Case Study III

The male child was 13 years and 11 months old when he went missing. His body was found approximately three months later within walking distance of the family home. He had taken his own life by hanging. A PA interview was conducted with his mother via telephone one year and 9 months after his death.

At the time of his death, the child lived with his biological mother, stepfather, and older biological sister. His parents had separated and divorced when he was two years old and there was a period of three years where there was no contact with his biological father following the divorce. Since then, the decedent’s relationship with his father was described as ‘distant’, having had very little contact outside of major holidays. The child’s father began a new romantic relationship, although his mother was not certain of when. When the decedent was approximately seven years old, his father called to say he and his new partner had had a baby. Despite some initial jealously towards the younger half-sibling, he became fond of his younger brother. The mother indicated some feelings of animosity between the child and his father’s de facto (‘she wasn’t very nice to my kids’), stating that she seemed to think ‘that her child [with the father] should get the attention’.

His mother and stepfather began their relationship when the child was approximately 3 years old and married when he was 7 years old. His mother maintained that the child considered his stepfather as his dad and stated that he was his ‘father in reality’, although they did ‘rub each other the wrong way’. During his formative years, he was ‘very close’ with his mother. While the child’s older sister had ‘thrived at day-care’, the decedent had not and so his mother had stayed home with him. They ‘talked often’; however, once he reached adolescence ‘distance started’ but his mother had believed this was ‘within adolescent normality’, maintaining they had a ‘strong bond and love’. He was thought to adore his older
sister; however, as she grew up she ‘had less time for him’ and would sometimes be bossy which would sometimes lead to arguments between them.

The deceased made several statements of hopelessness in the two months prior to death: ‘I’ve done everything…nothing left in life’. He was also seemed angry and depressed. The deceased made multiple implicit statements (for example, ‘I just want to move on. I’m tired of life’) and explicit statements (for example, ‘I want to kill myself’) on Facebook. There was evidence of multiple episodes of self-harm. In primary school, the deceased had given himself a ‘frosty’: a type of frostbite-burn caused by the pressurised gases within an aerosol-can held at close proximity to the skin for an extended period of time. Although medical attention is highly advisable for these types of burns, his mother reflected that she did not know if this was an episode of self-harm or ‘playing around’. Six months prior to death, his mother observed ‘long scratches on his arm’ and observed that he often picked at wounds and coloured around them. The mother wondered if this was an attempt to disguise wounds. The deceased had also made statements on Facebook about self-harm, including lighting a piece of paper and holding it against his leg as well as carving a band’s name into his foot: the mother wondered whether he used clothes to hide episodes of self-harm. After the child’s death, a drawing by the decedent was found in his room. The drawing depicted a boy (presumably the decedent) standing in his underwear, with a cloud around his head, a noose hanging from the fan above, and the words ‘could I?’

The child had made two, perhaps three, known suicide attempts in the six months prior to death; all discovered by his mother posthumously via Facebook communication. On the Friday prior to his disappearance, he told a friend of his prior attempts and that ‘he would get it right this time’. His mother was unaware of the numerous statements of implicit and explicit intent being made to peers before his death. There was speculation that the deceased
had made a ‘perfect noose’ in advance and hidden it. Some altered behaviour was also observed in the deceased the night prior to his disappearance— he seemed in high spirits, ‘joking with the family’. His body was found within walking distance from his home, approximately three months after his disappearance.

The deceased had become interested in ‘emo’ and ‘screamo music’, so described by his mother. Some of these bands feature lyrics about suicide and self-harm and it was believed he had visited the websites of these bands along with pornographic sites; however, he was adept at deleting the computer search history. The deceased had also started to experiment with drugs and alcohol. While liquor within the family home was generally securely stored, it appeared that the decedent had been secretly consuming alcohol, which had been unaccounted for.

His paternal grandfather died by intentional carbon monoxide poisoning. Suffering untreated Bipolar Disorder, the grandfather had made several attempts on his life. Although this death had occurred before his birth, the deceased was aware of the suicide. The child’s maternal uncle was also diagnosed with Bipolar Disorder (onset 19-20 years old), although his mother maintained that her brother ‘copes well and without medication’.

On the CBCL problem scales, his Total Problems and Internalising Problems were within the clinical ranges, while his Externalising Problem scores were within the borderline-clinical ranges, for boys aged 12-18 years. His scores on Anxious/Depressed, Social Problems, and Aggressive Behaviour syndromes were in the normal ranges. His scores on Somatic Problems, Attention Problems, and Rule-Breaking Behaviour were in the clinical ranges. His scores on Withdrawn/Depressed and Thought Problems were within the borderline-clinical ranges. On the DSM-Orientated scales, his scores on the Affective
Problems, Somatic Problems, Attention Deficit/Hyperactivity Problems, and Conduct Problems were in the borderline-clinical ranges.

He experienced numerous somatic health issues: ‘he was sick a lot...he did get sick a lot... had all sorts of things wrong with him, which meant that he quite often had time off school’. He had a ‘striking’ decrease in energy and enthusiasm at age 11. This coincided with a decrease in school performance, where previously he had achieved high grades. At the time, the mother stated that he ‘seemed distracted or lacking attention’, but also indicated that the difficulty level of the school work had increased and she questioned: ‘how much was normal or not?’ During his life, no formal diagnosis of mental illness was made. However, in retrospect, his mother speculated that he might have suffered from undiagnosed depression. Although not a proposition of blame; his mother ‘tried and tried to get help’ in the 12 months prior to his death, including taking the deceased to numerous GPs, a paediatrician, and a nutritionist.

Findings from the MINI and consultation with panel of psychiatrists indicated that the decedent did not meet the criteria for a mental health disorder. It was recognised that the child experienced several depressive symptoms, such as depressed mood, fatigue, suicidal ideation, and previous suicide attempt. However, when framed within the context of impairment to functioning, it was deemed he did not meet the full criteria, particularly the timeframe requirements, for diagnosis of a mood disorder.

On the day of his death, the other students on the school bus, which dropped him off outside of his house, last saw him alive. He was last seen walking into his front gate. He was not seen leaving the house again; however, the residence backed onto a bush and mangrove area to which he had access. When his stepfather returned home from work, he noticed that he was not home and informed his mother who was still out. Initially, his parents were not
alarmed as they assumed he was with friends, had potentially missed his bus, or fell asleep on the bus causing him to go to the end of route; all of which had occurred before. However, at approximately seven o’clock, after becoming concerned about his whereabouts, his stepfather and sister began driving around the neighbourhood, as well as friends’ houses, in an attempt to locate him. He was reported missing by his mother around this time. A major investigation was then established to locate him. His skeletal remains were discovered approximately three months later situated below a hangmen’s noose knotted in a tree above. There was no indication of a third party.
**Figure 7.14.** Life chart representation of Case Study III

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<th>Age</th>
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<th>11</th>
<th>12</th>
<th>13</th>
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</thead>
<tbody>
<tr>
<td>Attachment</td>
<td>Parents separate &amp; divorced</td>
<td>Δ Half sibling born (Fa)</td>
<td>Small group of close friends</td>
<td>Distant relationship with Fa</td>
<td>Decrease in spending time with friends</td>
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<tr>
<td>Social circumstances</td>
<td>Δ No contact with Fa</td>
<td>Δ Mo started new relationship</td>
<td>Δ Mo remarried</td>
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<td>School and Education</td>
<td>Δ Moved</td>
<td>Δ School</td>
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<td>Financial events</td>
<td>Δ Started skipping class</td>
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<td>Forensic/Legal</td>
<td>Highschool</td>
<td>Δ Private school</td>
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<td>Drug and Alcohol</td>
<td>Back to original school</td>
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<td>Health</td>
<td>Δ Mother away for a few weeks</td>
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<td>Psychiatric difficulties</td>
<td>Δ Drop in school performance</td>
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<td>Contact with services</td>
<td>Δ Drop in grades</td>
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<td>Suicidality</td>
<td>Δ ED Accident (stepped on fish)</td>
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<td>Exposure</td>
<td>Δ Hospitalised (infection)</td>
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<td>Other relevant information</td>
<td>Δ Remarkable loss of energy from time to time</td>
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<td>Δ Visting different GP's, nutritionist, paediatrician</td>
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<td>Δ Different somatic complaints</td>
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<td>Δ Visiting different GP's, nutritionist, psychiatrician</td>
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<td></td>
<td>Δ Drawings with explicit suicidal themes</td>
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<td>Δ Frosties at school</td>
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<td>Δ Multiple episodes of DSH</td>
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<td>Friday prior to friends - 'I will get it right this time'</td>
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<td>Δ Two suicide attempts</td>
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<td>Δ Told friend of attempt and 'want[ed] to try again'</td>
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<td>Δ Statements: 'I have done everything, nothing is left'</td>
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<td>Δ Listening to 'emo' music</td>
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<td>Δ Self conscious of forehead</td>
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<td>Δ Lost virginity. Viewing pornography on the internet</td>
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<td>Δ Playing with fire</td>
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<td></td>
<td>Δ Ran away; called Mo to pick him up</td>
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<td>Δ Night prior described as happy, joining in with family</td>
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- **Maternal G/father and Uncle Bipolar. Knowledge of G/father's suicide**
- **Mo car accident**
- **Mo diagnosed with (critical condition) Breast Cancer**
7.3.2.4 Case Study IV

The male child was 15 years and 10 months when he died by suicide by means of hanging in a building adjacent to the family home. A PA interview was conducted with his mother via telephone 6 years and 11 months after his passing.

At the time of his death, the child was living at home with his married biological mother and father. Although he ‘wasn’t a talker’, his mother maintained that she had a ‘great relationship’ with her son. His father did not actively participate in family life: ‘on family holidays, dad would stay home’. The mother described father/son quality time as watching TV; the deceased was ‘upset that he wouldn’t do anything with him’. Two weeks before his death, the decedent had tried to get his father to go hunting with him and was ‘so disappointed’ when he refused. He had an older biological sister and brother who had both already moved out of home. He was described as having a great relationship with his sister and they often spoke by phone. In contrast, he would often fight with his brother; they ‘didn’t get along at all’. Indeed, the decedent was described as being ‘pleased’ when his elder brother moved out of home.

Considered an introverted child, he had a small number of friends at school that he saw infrequently outside of school hours due to the remoteness of the family home. However, he was the victim of ongoing bullying at school, which consisted of exclusion from social events and being called names. He was also bullied on the school bus and eventually stopped catching it. His mother had approached the school but was ‘dismissed’. During primary school, bullying towards the decedent became such an issue that his mother made the decision to change schools.
The year before his death, the deceased had completed Grade 10 and had then commenced an apprenticeship, which he had been attending for a few months. During this time, there was an incident of some kind at work, involving teasing; however, the decedent refused to tell his mother any further details. She maintained that he was ‘apprehensive’ about attending work. He did not attend work the two working days prior to his death. He also attended TAFE in relation to his apprenticeship. On the last day of TAFE before his death, his mother observed him spend extra time with his friends when she went to pick him up; on reflection, she wondered if he was ‘saying goodbye’.

The child conveyed several expressions of suicidal ideation during his life. These thoughts were expressed at age 7 when he spoke of wanting to die. He again made similar statements at age 11. After this second expression, the decedent was taken to counselling with a psychologist; however, it took three-and-a-half weeks for an appointment to become available. In total, he attended three sessions including: one alone, one with his mother, and one family session. During the initial assessment of his intent, the decedent listed many and varied methods of suicide. In the third family session, his risk was reassessed and he was asked if he was still thinking about suicide – when the decedent said ‘no’ it was deemed he did not need to return for treatment. Overall, his mother was ‘satisfied’ with his treatment. Around the time of his death, his mother observed superficial cuts with metal shavings in them on his forearms. When his mother asked about them, the decedent ‘dismissed it’. The child had access to a firearm at the family home and two weeks prior to death had gone hunting. Hunting was a common past time; however, the last time he went hunting before his death, the child ‘revisited’ the carcass of the animal to observe its decomposition.

Three years prior to his death, the child’s maternal uncle suicided by hanging. In the month prior to his uncle’s death, the deceased and his mother had spent several days with his
uncle and family. Following the visit, he discussed with his mother how he was distressed by how his aunt spoke to his uncle. A maternal cousin had also experienced suicidal ideation and his mother believed the decedent and his cousin might have spoken about it together.

The decedent was described as having a long history of anxiety. He was described as ‘a very big worrier’, which was characterised by ‘hands sweating’ and excessive worry-focused ruminations; for example, he would be ‘worrying about an event at the end of year in February’. His mother also recalled some instances of possible under-eating as the decedent ‘was worried about getting fat’. On the CBCL problem scales, his Total Problems and Externalising Problems scores were in the normal ranges, and his Internalising Problems score was within the clinical range for boys aged 12-18. His score on the Anxious/Depressed syndrome was within the borderline-clinical range, and his score on Somatic Complaints syndrome was in the clinical range. On the DSM-Orientated scales, his scores for Affective Problems and Anxiety Problems were in the borderline-clinical ranges, and his score on the Somatic Complaints scale was in the clinical range. Findings from the MINI and consultation with panel of psychiatrists indicated that the child likely suffered from a Generalised Anxiety Disorder as characterised by his history of excessive anxiety and worry, distressing ruminations, and physiological symptoms, such as a racing heart and sweating.

Two months prior to his death, the decedent had wanted to purchase a motorbike; however, his father refused. The decedent was ‘very angry’ about this as he ‘needed something to do’. He had also expressed a desire to move closer to a metropolitan area but his father shut down any plans of this nature. In the weeks prior to his death, the decedent had visited his GP on several occasions due to nausea and vomiting, a ‘barking type cough’, and a lump on his wrist, which appeared infected. He was prescribed medicine commonly used to treat nausea and vomiting and advised to take Neuofren or Panadol for pain relief. On the
Saturday prior to his death, the decedent had wanted to go to the doctor again; however, he was ‘very adamant’ about going to a different doctor but ‘wouldn’t say why’. Due to financial and external constraints, his mother was unable to take him. When grocery shopping a few days prior to his death, he had not wanted his mother to buy any of his favourite foods. His mother also recalled uncharacteristic anger from the child when she had forgotten to bring take-out home for him several days prior to his death.

The day before his suicide, the deceased seemed ‘down’ and ‘slept all day’. In the evening of the day of death, the decedent was watching television when he left the room and came back ‘with a smirk on his face’. Later, his mother observed an extension cord over the clothesline but ‘didn’t think anything of it’. He was last seen alive in his bedroom at approximately 8:30pm. During the early hours of the morning (between 2-4am), his mother heard some noises, which in retrospect she reflected may have been her son. His father became concerned when he was unable to find his son in his room early the next morning. His body was found in an older house that was adjacent to the newer family home suspended by an extension cord; CPR was commenced but there were nil signs of life. While several empty blister packs (96 tablets altogether) were located in the child’s room after his death, no obvious pills, capsules, or tablets were found in his stomach contents during autopsy.
Figure 7.15. Life chart representation of Case Study IV
7.3.2.5 Case Study V

The female child was 13 years and 4 months old when she died by suicide by hanging in paddock nearby to the family home. A face-to-face PA interview was conducted with her biological father 8 years and 3 months after her death.

At the time of her death, the child was living at home with her biological mother, twin brother, and biological younger brother. Her father and mother had experienced marital difficulties for approximately six months prior to her death and her father was temporarily residing with his brother-in-law. Approximately two months prior to her death, her mother and father had been discussing separation and her father described her as ‘terrified of us breaking up’. Two days prior to her death, her father had found out about his wife’s recent infidelity and had written a letter to his wife (which spoke of the infidelity), leaving it at the family home. However, it is not known if the decedent saw this letter. Further, her father described the twins’ relationship as turbulent and indicated to ‘psychological bullying’ toward the decedent perpetrated by her twin brother. In contrast, the decedent was ‘very close’ with her younger brother.

Before her death, there had been no apparent changes in her school attendance, behaviour, or performance. She was considered an average student with many friends, although it was apparent she preferred spending time with younger children with whom she could be the ‘leader’. Having recently completed primary school, the child was on Christmas holidays prior to commencing high school. There was no discernable apprehension regarding this transition. Her father described the decedent as frequently engaging in risky behaviours; for example, ‘climbing and jumping from high places’ where she was ‘in the moment didn’t care’. There were also instances of inappropriate social behaviour. Her father recalled the following incident: ‘when she was younger my wife said she thinks, she thought she was
masturbating or something, or showing off somewhere. You know in a pool or something with a kid or something. It might have been just doing it on the outside or something… totally inappropriate for a kid at that age’. After her death, it was discovered that she had ‘lost her virginity’; however, it was believed that she had ‘only one’ sexual experience. Her father reflected: ‘whether or not she's like well fuck…I've got nothing to lose. I'm going to do this, so I'm just going to experience everything I can now. Live my life and forget about the consequences’.

In the 12-18 months prior to her death, she had become very attached to a horse owned by a neighbour, which was kept in a paddock adjacent to the family home. There had been some discussion ‘bouncing around, false starts’ of the horse being given to decedent. However, when this did not occur, as it was deemed a liability issue for the child to ride the horse unsupervised, she was very affected by this.

While the child had no known prior suicide attempts, self-harm by cutting was observed on several occasions; no incidences required medical attention. Her autopsy revealed multiple fine, mature, linear scars on the anterior of both her left and right forearms and both anterior thighs. In addition, several recent injuries, consistent with cigarette burns, were observed on her hands. While she had never before acted on them, multiple implicit and explicit statements indicative of suicidal ideation were made; for example, during news coverage of a natural disaster she commented: ‘those lucky people, wouldn’t it be nice to be dead’. Following her death, several discoveries were made of further suicidal ideation and intent: a concealed picture of someone hanging and ‘I will die today’ engraved into her bedroom desk. She also made multiple diary entries, discovered posthumously, outlining her emotional difficulties, including a statement directed to her twin regarding their relationship difficulties: ‘he’ll feel bad when I’m dead’.
She had also experienced suicidality within her social group. Approximately 12 months prior to her suicide, a very good friend attempted suicide by overdose. When enquiring about the impact this incident had on his daughter, her father reflected, ‘I think she was impressed’. Around the time of her death, she had become interested in songs that featured themes of death and suicide. Her father stated that there was evidence that she had been searching the Internet and visiting websites with suicide and death themes which the father suspects were ‘glorifying suicide’.

She had some contact with mental health professionals during her life. At age 11, a GP who referred her to see a mental health professional; however, her father was not able to recall the specific type of professional. The deceased along with her twin brother were diagnosed with ADHD and prescribed medication in conjunction with this diagnosis, which the deceased took for one year before ceasing. Approximately six months prior to her death, she had expressed that she might like ‘to see someone’ (like a psychologist or counsellor); however, she did not attend any services.

On the CBCL, her Total Problems and Externalising Problems were in the clinical ranges while Internalising Problems were in the normal ranges for girls aged 12-18. Her scores on the Thought Problems syndrome and Rule-Breaking syndrome were in the clinical ranges. On the DSM-Orientated scales, she scored within the borderline-clinical ranges for Affective Problems, Attention Deficit and Hyper Activity Problems, and Conduct Problems scales. Findings from the MINI and consultation with panel of psychiatrists indicated that the child did not meet the criteria for any mental disorder. However, it was acknowledged that she exhibited some histrionic traits as characterised by her excessive attention seeking and sometimes exhibitionist behaviour. In addition, she may have been experiencing some
attachment issues in relation to her parents as a consequence of their recent separation and her relationship with her twin brother.

Her mother last saw her alive on the afternoon of her death. She was noticed missing at approximately 3pm; her mother became immediately concerned for her welfare and started looking for the decedent in the local business district. Her twin brother located her approximately three hours later in the paddock, where the horse was kept, and he immediately notified their mother. They both returned to the paddock where her brother cut her down. Her mother commenced CPR while her brother alerted QAS. When QAS attended the scene, the decedent was found to have nil signs of life.
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<td>Risk taking behaviour- climbing and jumping from high places, pool incident</td>
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*Figure 7.16. Life chart representation of Case Study V*
7.3.2.6 Case Study VI

The female child was 15 years and 7 months old at time of her death. A face-to-face PA interview was conducted with her mother 6 years and 3 months after her passing. Initially ruled a suicide, this case was then investigated as a possible homicide before being subject to an inquest. The inquest ruling of cause of death was that of suicide by hanging (death occurred in hospital). At the time of the interview, the mother continued to believe her child’s death was not suicide but murder. This belief is respectfully acknowledged here.

Approximately four years prior to her death, the child’s parents separated and were divorced approximately one year later. Her parent’s marriage was turbulent with allegations of severe domestic violence perpetrated by the child’s biological father towards the biological mother during the course of their relationship and continuing after separation. A domestic violence order (DVO) was taken out by the mother against the father at the termination of their marriage. Her mother alleged that the family experienced extreme financial hardship in the immediacy of the separation due to her father closing accounts, lack of child support, and legal fees.

Her mother described her relationship with her daughter as ‘extremely close, loving and affectionate’. In stark contrast, she described the child’s relationship with her biological father as ‘extremely abusive… emotionally and verbally abusive’, and maintained that the decedent ‘hated him’. Her mother began a new romantic relationship after the dissolution of her marriage. When the decedent was 12 years old, her mother’s new partner moved into the family home and the pair were married. Her stepfather’s two children from a previous relationship also moved into the family home at that time. Also living in this residence was the child’s biological older brother and one of his friends (the same age as her brother).
The transition to high school from primary school was difficult for the child who found it hard to adjust. Her high school education was marked with frequent school changes (more than three), increasing truancy, and some other behavioural problems; for example, she would ‘occasionally get in trouble at school for wearing makeup’. Her mother purported that she was bullied a little at school, mainly being excluded by others. Prior to her death, she was in Year 10 and concurrently attending TAFE part-time. However, the decedent had stopped attending school at the beginning of the year in which she died and had also withdrawn from TAFE. It was the mother’s belief that her daughter withdrew from TAFE due to being ‘stalked by her father’ there. Corroborating evidence (from CDR) suggested that there might have been a general lack of school attendance as long as a year-and-a-half prior to her death.

Her life was marked with unstable and frequent changes in accommodation. At the beginning of her 13th year, the decedent lived with several different families of friends, and shifts between these different accommodations occurred intermittently, as often as every two weeks. At age 14, her mother purported that the deceased was picked up from a friend’s house by her biological father and ‘not returned home’ [to the mother’s residence]. Instead, the child then lived with her paternal grandmother for a period time – this constituted one of the aforementioned school changes. The mother alleged her daughter later moved out and returned home due to inappropriate sexual behaviour towards the child by her paternal uncle, who also resided at her grandmother’s residence.

Due to these continuing and serious issues, the child was known to Child Safety. It was also alleged that an unnamed assailant raped her the year before her death. When the decedent was approximately 14 years old, she was caught shoplifting; however, she was let off with a warning. She had been engaging in a number of high-risk behaviours, including drug use and/or abuse, and potentially prostitution. Post-mortem toxicology results indicated
therapeutic levels of drugs administered during hospitalisation. Ante-mortem toxicology results detected low levels (within therapeutic range) of an antidepressant and inactive metabolite of cannabis. It is unknown if the antidepressant present during ante-mortem toxicology was a prescribed medication. Around 3-4 months prior to her death, she testified in court in relation to a rape and drug trafficking case. Around this time, her mother alleged that her daughter was receiving threats of death and general violence directed to both herself and her family.

Approximately 12-18 months prior to death the decedent ran away from her mother’s home. During this time, the mother asserts she was able to maintain relatively good contact; however, there was a two-month period in which she had very little contact with her daughter. Sometime within the year prior to her death, the decedent began a romantic relationship with ‘X’, an adult male (10+ years her senior) who was a heavy drug user and had recently been released from prison. During their relationship, the decedent intermittently resided with ‘X’, along with X’s adult brother and his child (X’s nephew). The decedent was uncooperative or unresponsive to attempts by numerous agencies to place her at a safer residence. Around this time, the decedent was also a resident of an assisted living facility for youth during the week; her mother stated she would return to her home during the weekend. Despite its inappropriateness and illegality due to the child’s age, the relationship between X and the decedent was sexual in nature. The relationship was also abusive and violent (emotionally, psychologically and physically). Her mother alleged that X wrote letters to the decedent telling her to ‘kill yourself or I will’. The mother stated that, six days prior to her death, the decedent ended this relationship.

Her mother maintained that she saw no evidence of suicidality. The decedent had not become interested in music or other forms of media with suicidal themes; she had neither
expressed any feelings of hopelessness nor started giving possessions away. Her mother did concede an incident (in the year prior to her death) where her daughter called out for a bandage as she had ‘superficial cuts’ on her arm. The mother described how a bandage ‘was more than what was required’ but that the child was adamant that she needed a bandage. Her mother stated that the decedent claimed it ‘took her mind off her problems’. Her mother also revealed that, while her biological father claimed the decedent was engaging in multiple acts of DSH, she never saw any indication of this. However, she conceded that ‘she did have some scars there but she scarred really easily’. Autopsy findings revealed multiple clusters of linear scars (varying lengths) located on the anterior of her forearms and thighs and two larger linear scars on her left loin.

According to her mother, some family members had experienced psychopathology. The child’s biological older brother was diagnosed at age eight with ADHD. When the decedent was 5 years old, her biological father was diagnosed as Bipolar, Narcissist, and Attention Deficit Disorder (ADD) by a psychiatrist. Her father was prescribed medication in relation to these mental health difficulties and was mainly compliant.

The child had also experienced the suicide deaths of others in her family, although two of these deaths occurred prior to the decedent’s birth. The decedent’s paternal grandfather was an inpatient suffering an unknown diagnosis when he took his own life. Her great uncle also died by suicide. In addition, her childhood baby-sitter took his own life as a teenager; while her mother reflected that her daughter might have been affected by his death, she questioned whether her daughter was aware of the cause of death. After the child’s death, her mother discovered that a friend of the child to whom the decedent was very close (‘they were inseparable’) had attempted suicide. However, no further details were known.
Approximately nine months prior to her death, the stepparent of a close friend passed away; this death was not a suicide. The decedent appeared greatly affected by this death.

At the age of 11, following the dissolution of her parent’s marriage, the mother took the decedent to see a psychiatrist to check how she was coping. She was deemed as ‘handling it well’ and that there was no need to return. At age 14, she was diagnosed with depression by her GP. At this time she was prescribed medication of an unknown type but she was not compliant with this. Approximately 16 months prior to her death, the decedent was ‘very distraught and upset’ which resulted in her mother taking her to the local hospital for assessment. This did not result in admittance as an inpatient. While she was offered counselling, she did not engage with services at this time. Following this incident, she had several more visits to her GP where she was deemed to still fit the criteria for depression. She was admitted as an inpatient in a hospital psychiatric unit for 4-5 days approximately 14 months prior to death. This was following an incident of DSH (cutting) at her father’s house, which resulted in her father calling QAS. In addition, approximately nine months prior to her death, following drug use and an emotional crisis, she was taken to hospital by a youth worker. Her mother claimed that the decedent commenced taking the GP-prescribed anti-depressants approximately 2-3 months prior to her death and to her mother’s knowledge she was compliant with her medication until her death. Her mother also reported some disordered eating behaviour, recounting an incident where her daughter consumed a whole cake in one sitting.

On the CBCL problem scales, her Total Problem Score was in the borderline-clinical range and her Externalising score was in the clinical ranges for girls aged 12-18. Her score on the Thought Problems syndrome was in the borderline-clinical range and her score on the Rule-Breaking syndrome was in the clinical range. On the DSM-Orientated scales, her score
on the Affective Problems was in the clinical range and her score on the Conduct Problems was in the borderline-clinical range. Findings from the MINI and consultation with panel of psychiatrists indicated that the child did not meet the criteria for any mental disorder. However, she did experience a large number of psychosocial difficulties and likely experienced attachment issues.

On the evening prior to her death and the day of her death, there is evidence to suggest that there were ‘many loud and distressing arguments’ between the child and X. On the day of her death, several calls were made to the QPS and Child Safety by X’s brother who was concerned about her wellbeing and relationship with X, particularly in relation to X assaulting the decedent and providing her with drugs. While QPS attended the scene, the child was not located at this time, although the residence was not extensively searched. The two attending officers then went to search the surrounding streets for the child. It is purported that, immediately after the officers left, X and his brother located the decedent hanging from a beam underneath their residence and the QAS was alerted. The previous QPS officers also re-attended the scene upon hearing the QAS alert via dispatch. Upon arriving, the QAS found the decedent still alive and lying on the front lawn of X’s residence, where she was resuscitated and subsequently transported to hospital.

However, at hospital, the decedent was deemed to not be responding to medical measures [and] continuation of further resuscitation was futile. She was pronounced deceased later that same evening. A subsequent investigation resulted in X being charged with aiding a suicide (under s. 311 of the Criminal Code, 1989 [QLD]). This predominantly stemmed from evidence provided by X’s brother and nephew (a minor) and written material including, but not limited to, the aforementioned note from X to the decedent. The charge against X proceeded through the committal process but the jury was unable to reach a verdict.
However, X was found guilty of unlawful carnal knowledge of a minor (under s. 215 of the Criminal Code, 1989 [QLD]). It was noted that X was uncooperative in providing evidence and answering questions and was additionally charged with, and found guilty of, contempt of court (under s. 129 of the Criminal Code, 1989 [QLD]). Inquest findings stated that the cause of death was suicide; however, the degree to which the child was affected by drugs X provided to the child, the influence of X’s abusive actions or the degree to which the child was encouraged or assisted by X remained uncertain.
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<td>Brothers friend moves in</td>
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<td>Δ Financial hardship stemming from parental separation</td>
<td>Δ Shoplifting - given warning</td>
<td>Δ Alleged rape</td>
<td>Δ Testified in court re: drug trafficking case. Started receiving threats</td>
<td>Δ Possible participation in prostitution</td>
<td>Δ Experimentation in drugs and alcohol</td>
<td>Δ Disordered eating behaviour</td>
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**Figure 7.17.** Life chart representation of Case Study VI
7.4 Discussion

Suicide among children younger than 15 years is a leading cause of death worldwide (Apter et al., 2009). In Queensland, a recent paper (Paper 1 of this thesis, see Chapter 5) indicated that in 2004 to 2012, suicide accounted for almost one-third of external causes of death for children aged 10-14 years and was the second-leading cause of death after transport-related fatalities (Soole et al., 2014a). Given the predominately quantitative investigation of suicidal behaviour within the suicidology field to date, and to contextualise the quantitative findings of this thesis (refer to Chapters Five and Six), the current study endeavoured to look at child suicide at an idiographic level. To achieve this, 12 PA interviews were conducted with parents of children who died by suicide and OEC. The quantitative findings of this thesis (see Chapter Five and Six) demonstrated several factors, which are associated with children who die by suicide. These factors within the context of the six suicide cases included in the PA component are discussed below.

Quantitative findings indicated that half the children who died by suicide in Queensland, between 2004 and 2012, had experienced mental health and behavioural difficulties prior to their deaths. Specifically, children were found to have disorders usually diagnosed in infancy, childhood and adolescence, such as ADHD, significantly more frequently compared to adolescents who had died by suicide. Previous research has indicated that parents participating in PA studies may underestimate the prevalence and severity of psychiatric disorders in their children (Velting et al., 1998). The findings of the current study indicated that five of the six parents whose child died by suicide suspected that their child was experiencing mental health difficulties prior to their death. This was further demonstrated by these parents having sought assistance from a health professional (GP,
psychologist, psychiatrist, developmental paediatrician) in relation to these observed issues prior to their child’s suicide.

Results of the CBCL indicated that parents of children who suicided reported their child displayed more behavioural, social, and emotional problems than were typically reported by parents of children who died by OEC (within the current study). Interestingly, children who died by suicide who were found to have higher scores within the internalising broad-band scale (behavioural problems involving over-controlled behaviour) were also found to have lower scores on externalising behaviour broad-band scale (behavioural problems involving under-controlled, excess, or acting-out behaviour (Achenbach & Rescorla, 2001). Conversely, children who were found to have higher scores within the externalising behaviour broad-band scale had lower scores within the internalising broad-band scale. Internalising behaviours characteristic of mood disorders (e.g., depression) including, withdrawal from peers or social isolation, depressed mood, and anxiety, have been associated with suicidal behaviour (Alsaker & Dick-Niederhauser, 2006). In addition, acting out behaviours characteristic of externalising behaviour broad-band scales could also be considered as a ‘cry for help’ in vulnerable children.

As described in Section 7.2.3.2, scores on the CBCL can indicate further diagnostic assessment is warranted. Previous research has indicated that children who die by suicide show lower rates of psychopathology than do adolescents and adults who die by suicide (Brent et al., 1999; Grøholt et al., 1998; Loh et al., 2012; Marttunen et al., 1991; Shaffer et al., 1996). When these difficulties and MINI results were considered within the developmental and environmental context of the child’s life, in consultation with a panel of psychiatrists, only two children were considered to have reasonable conjecture of a clinically-diagnosable mental illness. These findings highlight that, while not necessarily indicative of a
diagnosable mental illness, parents remain an invaluable source for observing altered behaviour in children, which may be cause for concern. Any diagnosed psychiatric disorder potentially heightens an individual’s risk for suicide. However, this risk is exaggerated when comorbidity exists and other associated factors of child suicide are also occurring (Apter, Krispin, & Bursztein, 2009; Spirito & Esposito-Smythers, 2006).

Four of the six children who died by suicide, and three of the six children who died by OEC, had been previously touched by suicidal behaviour (ideation, attempt, or suicide death) during their lives, either within their families or peer network. Several authors have since contended that Shneidman’s (1969) original estimation of suicide affecting at least six people is a likely under-estimation of the true impact of a single suicide (Lukas & Seiden, 2007; Maple et al., 2010; McIntosh, 2003; Wong et al., 2007). Indeed, more recent estimation has been as high as 80 affected individuals (Berman, 2011). Given that exposure to suicide is so much broader than what has originally been presumed, it is not unrealistic to expect that children who died by OEC would also be affected by suicide during their life.

Children who died by suicide were observed as having had an increased interest and/or preoccupation with death in general (and sometimes suicide more specifically) prior to death as demonstrated through literature, the arts, and various forms of media. Children who died by suicide have been found to display an interest in suicide prior to death (Freuchen et al., 2012a). A preoccupation with death has been further found to be significantly correlated with the degree of lethality in subsequent suicidal behaviour (Pfeffer et al., 1979). Parents interviewed in this study commonly reported evidence of prior suicidal ideation with suicidal intent often communicated prior to death by children, both implicitly and explicitly. However, at the time, the seriousness of these behaviours were generally greatly diminished or even dismissed as attention seeking. This underscores the danger of underestimating the
intensity of children’s emotions and seriousness of suicidal expression or behaviour, and highlights the importance of taking all suicidal communication by children seriously.

Adverse events were more commonly identified in cases of children whose deaths were due to suicide – often these children were dealing with multiple stressors. This occurred for both precipitating incidents and stressful life events during their lifetime, which can be viewed as more chronic and enduring. In this study, poor parent-child communication was identified as a recurring issue for three of the six children who died by suicide. Frequently, a familial conflict had occurred prior to death. Similarly to previous research, these conflicts were not considered significant at the time (Beautrais, 2001a; Freuchen et al., 2012b).

School-related problems were also prominent factors experienced by children, both as more chronic and enduring in nature and as events, which served as precipitating events to the suicide. Here, issues of bullying, school performance, and absences such as truancy were common among children who died by suicide. All forms of bullying behaviour (either as a victim or perpetrator) have been shown to be positively associated with increased suicidal ideation and behaviours (Shin Kim & Leventhal, 2008). In addition, absence from school or other employment at time of death has been found to heighten the risk for suicide. These findings support the premise that social isolation may be implicated with suicidal behaviour (Gould, et al., 1996; Pelkonen & Marttunen, 2003). Indeed, compared to children who died by OEC, children who died by suicide were found to engage with fewer organisations and participate in smaller social groups.

While some empirical evidence suggest that children may experience fewer common adult suicide risk factors, such as psychopathology, Grøholt and colleagues (1998) have argued that the lower incidence of child suicide may be related to children’s exposure to fewer risk factors rather their resilience to these risk factors. Rarely can a death by suicide be
attributed in isolation to a single factor (De Gioannis & De Leo, 2012; van Heeringen et al., 2000), but this complexity could be attributed to other causes of child death. For example, a child death by drowning (one case of OEC death) has complex interplay of factors, which are implicated in the circumstances of the child’s death, including supervision, temporal and geographic variations, and environmental factors such as fencing (Brenner & Committee on Injury, Violence, and Poison Prevention, 2003). Multiple factors, which were demonstrated in the quantitative components of this thesis as being associated with suicide in children, were present in cases of suicide deaths, but were absent or were present to a lesser degree in cases of OEC. As demonstrated through the life charts, for children who died by suicide these factors were often cumulative in nature.

However, one parent (Case Study II) was quite adamant in his belief that his daughter took her own life as a consequence to experiencing sexual abuse. An adverse event such as the occurrence of sexual abuse is a potential risk factor for suicidal behaviour (Tishler et al., 2007; Séguin et al., 2011). Indeed, lifetime history of abuse has previously been demonstrated to represent an extremely increased risk for suicide in children (Brent et al., 1999). While not discounting or minimising the impact of this abuse on the child, potentially, within the father’s search for meaning following his daughter’s suicide he was drawn to an ‘overly simplistic’ explanation. Here the influences of other pertinent factors such as the bullying and parent-child conflict also occurring shortly before death were potentially minimised.

Between 2000 and 2010, Indigenous children in Queensland were found to have a suicide rate 12.63-times higher than other Australian children (Soole et al., 2014b, see Chapter Six). Despite this over-representation of Indigenous children within the state suicide figures, there was an under-representation of Indigenous children in the current study. Table
7.1 depicted the recruitment of the suicide group as a function of ethnicity and showed the difficulties associated with contacting this important sub-group within child suicide for research purposes. Indeed, the finite number of potential Indigenous participants able to be contacted had greatly diminished from the number of eligible cases in the initial recruitment stages (see Section 7.2.4.1.1). Here, almost half the NOK of Indigenous children who died by suicide declined to be contacted for research purposes by attending QPS officers at time of death. The disinclination to participate in future research endeavours by Indigenous NOK could indicate a need to improve relations between mainstream social institutions, such as the police service and Indigenous communities (Eversole & Routh, 2005). Moreover, it could be a reflection of cultural differences regarding death and grief (Maher, 1997; McGarth & Phillips, 2008; Spiwak et al., 2012; Westerman, 2001). The implications of conducting research with cultural sensitivity in the context of the current study will be discussed in more detail in Chapter Nine.

Children who die by suicide are more likely to be known to the Department of Communities prior to death (Soole et al., 2014a). However, in this study, only one child was known to the child protection system prior to death. Potentially parents whose child was known to Child Safety may be less inclined, or reluctant, to participate in research such as this. In these instances, other caregivers or non-biological parental figures may be invaluable sources of information and potentially a wider, more liberal operationalisation of caregiver, extending beyond ‘biological parent’, should be implemented in future research.

As discussed in Section 3.2, the age group generally used within research for the operationalisation of children is 10-14 years. Due to recruitment difficulties within the PA section of this thesis (see Section 7.2.4.1); parents of children who died prior to their 16th birthday were eligible to participate. As a result, the overall average age children included in
the case study section of this thesis was almost 15 years old. The extent that this influences the findings of the current study is difficult to speculate. Given the small sample size, the generalisability of the current study is bound by time and space. As Yin (2003) states: "a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 13-14). Hence, while it may not possible to generalise these findings to all cases of child suicide, the cases presented here provides a rich description of six children who died by suicide and allows a deeper understanding within these cases.

7.5 Chapter Summary

The findings of this chapter further inform current understandings of the relatively under researched topic of suicide in children 15 years and younger. The quantitative components of this thesis demonstrated, and are further substantiated by the findings of the current study that a number of factors may lead to suicidal behaviour in children. Assessment of cases of child suicide on an idiographic level contextualised these factors and afforded the opportunity to reappraise what is considered ‘known’ about risk factors they apply to the suicidal process in children. The case studies presented within the current chapter allowed for a better understanding and insight into child suicide, which may improve intervention and prevention efforts.
Chapter 8

Parental Bereavement by Child Suicide: Is the Grief Landscape Different?

There are always two parties to a death: the person who dies and the survivors who are bereaved...and in the apportionment of suffering, the survivor takes the brunt

(Toynbee, 1969, p. 267-271)

8.1 Introduction

Bereavement as a consequence of death is universal. However, it is widely acknowledged that grief attached to bereavement is intensely individual and multifaceted; it involves behavioural, psychosocial, cognitive, emotional and physical consequences (Bailey, Kral, & Dunham, 1999; Shuchter & Zisook, 1993; Tomita & Kitamura, 2002). The terms ‘grief’ and ‘bereavement’ are often used interchangeably. However, bereavement specifically pertains to the death event, and grief is the multitude of psychobiological reactions to a loss such as and including death (Parkes & Prigerson, 2010; Shear, 2012; Tomita & Kitamura, 2002).

The relationship between the bereaved person and the deceased has been suggested as an important factor in bereavement outcome (Cleiren et al., 1994; Schneider et al., 2011; Stroebe et al., 2007), with the loss of a child suggested as a particularly traumatic experience (Maple, 2005; Stroebe et al., 1993; Wheeler, 1994). This loss is a complete deviation from parents’ normative expectations regarding the life cycle and challenges the existential assumptions that parents will not outlive their offspring (Braun & Berg, 1994, Mallon, 2008; Wheller, 2001). The death of a child can also present a sudden change to a parent’s existing identity and social role as a parent (Mallon, 2008; Riches & Dawson, 2000). This can be particularly severe for parents who experience the death of their only child (Wheeler, 1994).
The age of the child at time of death has been suggested to be an immaterial influence in the parental grief process (Rando, 1993). Two common and conflicting themes tend to emerge from research pertaining to parental bereavement. First, cause of death seems of little consequence to bereavement outcomes – here, it is postulated that, even if a parent knows the cause of death, it will not bring their child back (Cleiren et al., 1994; Dyregrov et al., 2003; Murphy, Johnson, & Lohan, 2003). Second, and in contrast, cause of death does indeed matter and death by suicide is the most difficult to comprehend and results in different bereavement outcomes (Jordan, 2001). Within this latter premise, researchers argue that the trajectory and process of suicide bereavement is more difficult compared with other modes of death.

Compared to other types of bereavement, it has been postulated that bereavement by suicide differs in several key ways, including: difficulties in finding meaning, more intense feelings of guilt, blame, shame, responsibility, rejection, and anger (Cvinar, 2005; Jordan, 2001; McMenany et al., 2008). These emotions are then intermingled with social responses, such as social stigma and isolation (Dunne & Dunne-Maxim, 2003; Jordan, 2001; Knieper, 1999; Provini et al., 2000; Séguin et al., 1995).

Quantitative evidence for discernible differences has been mixed (Cleiren et al., 1994; Murphy et al., 2003; Séguin et al., 1995). However, Jordan (2001) has suggested that differences may not emerge during early bereavement which is generally the timeframe assessed by quantitative studies. Jordan (2001) further postulated that suicide bereavement differs in its thematic content of grief. Arguably, quantitative analysis may not adequately assess the complex, multifaceted nature of bereavement and it has been suggested that qualitative analysis is required (Ellenbogen & Gratton, 2001; Hjelmelad & Knizek, 2010; McIntosh, 2003). Indeed, it has been previously suggested that there may be qualitative
differences in different forms of grief, even if quantitative differences fail to emerge (Clark & Goldney, 1995). Certainly, reports from individuals bereaved by suicide lend weight to these claims (Maple et al., 2010). In addition, Bailey and colleagues (1999) have suggested that the use of non-specific measures of grief may lack the ability to assess specific grief reactions associated with suicide bereavement, such as feelings of guilt, stigma, and heightened accountability for the death. Moreover, studies have typically been done without comparison groups, which preclude them from making definitive conclusions about any differences (McIntosh, 2003). Learning from these previous findings, this study aims to explore parents experiences following the suicide death of their child compared with parents experiences following the death of their child by other external causes.

8.2 Method

8.2.1 Case parameters

Parents were eligible to participate if they had experienced the loss of their biological child by External Causes of Death (Chapter XX of ICD-10) during the time period 2005 to 2012. The external causes of death included were: intentional self-harm (X60-X84); accidental deaths including transport (V01-V99); other external causes of accidental injury (W00-X59), including drowning and submersion, and exposure to smoke, fire and flames; fatal assault (X85-Y09), including neglect; and, event[s] of undetermined intent (Y10-Y34). Whilst not categorised under ICD-10 external causes of mortality, parents whose child had died of ill-defined and unknown cause of mortality (R99) were also eligible to participate. For the purposes of this study, the ICD-10 subcategories, with the exception of suicide, have been combined and are referred to hereafter as ‘Other External Causes of Death’ (OEC).
8.2.2 Recruitment

The methodological process for undertaking this phase of the project, and the methods used, was explained in detail in Sections 7.2.4. In total, 84 letters were sent to parents fitting the parameters of the study – 36 parents whose child had died by suicide and 48 parents whose child had died by OEC. Parents of children who had died by suicide were identified using the Queensland Suicide Register (QSR, see Section 4.1.3.1). Informants for OEC were identified and initially recruited by the Office of State Coroner (OSC).

An information package regarding the study was sent to all participants. For participants in the suicide group, the letter was followed up with a phone call approximately two weeks later to invite them to participate and arrange a time and place for the interview. In contrast, and in line with OSC protocol, parents of children who died by OEC were contacted on receipt of the consent form included in their information package. A minimum of six months was required to have passed from time of death for all potential participants. This ‘no contact’ timeframe is twice as long as what has been implemented in previous studies (e.g. Séguin et al., 2011). This was done to allow a respectful period of acute grieving time for the bereaved.

8.2.3 Procedure

All parents took part in a Psychological Autopsy (PA) interview about their child’s life and death with a trained clinical interview (PhD Candidate). A section orientated to explore the parents’ personal experiences since the loss of their child was also included in the interview. Specifically, parental bereavement was explored using the questions contained within the Grief Experience Questionnaire ([GEQ], refer to Section 4.2.1.3, Appendix 8.1) as probes. Originally used to evaluate several components of grief for individuals who had lost a
spouse, the GEQ was reformatted with permission to apply to a parent-child relationship; for example, replacing ‘your spouse’ with ‘your child’. In addition, questions in the original GEQ ask participants in terms of ‘the first two years’ after the death. This was modified in the current study to ‘since the death’.

Half of the interviews were conducted via telephone. The remaining half were conducted face-to-face; four within the participant’s home and two at the University campus. With one exception\(^6\), each interview was audio-recorded with permission and transcribed verbatim by a professional transcription service, Pacific Transcripts. The interviews ranged in length from 104 minutes to 360 minutes. All participants received a list of bereavement support services (enclosed with study information package), which they were able to contact at their discretion.

**8.2.4 Analysis**

Using thematic analysis (Braun & Clarke, 2006), the data was analysed for intergroup differences (that is, the suicide and OEC groups) using the frames within NVivo (Version 10; QSR, 2011). Several steps were involved: data familiarisation through initial reading and listening (and re-reading and re-listening) of transcripts; preliminary code identification; analysis of codes into overarching themes; review of themes in terms of internal and external validity; and, finally deliberation on defining and naming themes. The PA interview covered the child’s life in detail. As the current study aimed to explore parents’ experiences since the death of their child, data analysis was predominately focused on the data related to the grief experience of parents; however, each interview was reviewed in its entirety to ensure data saturation.

\(^6\) See Section 7.2.4 for further detail.
8.3 Results

8.3.1 Participants

Nine parents whose children died by suicide agreed to participate; however, three interviews were not completed due to communication difficulties. Of these three, one did not commence due to difficulties getting in contact to arrange an interview time, the second ended due to complications around conducting the interview over the phone, and the third ended due to difficulty arranging a second session to finish interview (parent considered to have opted to withdraw from the study). The remaining six parents whose child had died by suicide participated in a complete interview. At the choice of one participant, one interview was conducted with the child’s stepmother also present. Six consent forms were received from parents whose children had died by OEC. In total, 12 interviews were conducted in full and data saturation (see Section 4.2.1.3.2) was achieved within this number; there was 42 hours and 18 minutes of interview data.

This constituted final response rates of 16.7% and 12.5% for the suicide and OEC groups respectively. Table 8.1 presents the demographic characteristics of participants. Length of time since bereavement ranged from approximately one-and-a-half years to just over 8 years, with averages of 4.9 and 3.6 years for suicide and OEC respectively. It is pertinent to note that one parent held belief that her child’s death was not a suicide. While this belief is respectfully acknowledged here, this case is included within the suicide group, and discussed herein as a suicide, given the final finding by the Coroner following an inquest into the child’s death.
Table 8.1 *Participant Demographics and Time since Bereavement*

<table>
<thead>
<tr>
<th>Type of death</th>
<th>Participant Code</th>
<th>Age of child</th>
<th>Age of parent</th>
<th>Time since bereavement</th>
<th>Parents' Gender</th>
<th>Ethnicity</th>
<th>Marital status</th>
<th>ARIA+</th>
<th>SEIFA</th>
<th>Education level</th>
<th>Employment status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide</td>
<td>1</td>
<td>14</td>
<td>40</td>
<td>2 years 1 month</td>
<td>M</td>
<td>Caucasian</td>
<td>Remarried</td>
<td>Metro</td>
<td>Mod</td>
<td>Year 10</td>
<td>FT</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>11</td>
<td>41</td>
<td>4 years 7 months</td>
<td>M</td>
<td>ATSI</td>
<td>Divorced</td>
<td>Remote</td>
<td>High</td>
<td>H.Degree</td>
<td>FT</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>13</td>
<td>55</td>
<td>1 year 9 months</td>
<td>F</td>
<td>Caucasian</td>
<td>De Facto</td>
<td>Reg</td>
<td>High</td>
<td></td>
<td>FT</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>15</td>
<td>55</td>
<td>6 years 11 months</td>
<td>F</td>
<td>Caucasian</td>
<td>Married</td>
<td>Reg</td>
<td>Low</td>
<td>Cert/Dip</td>
<td>FT</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>13</td>
<td>43</td>
<td>8 years 3 months</td>
<td>M</td>
<td>Caucasian</td>
<td>Married</td>
<td>Metro</td>
<td>High</td>
<td>Cert/Dip</td>
<td>FT</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>15</td>
<td>44</td>
<td>6 years 3 months</td>
<td>F</td>
<td>Caucasian</td>
<td>Remarried</td>
<td>Metro</td>
<td>High</td>
<td>Cert/Dip</td>
<td>FT</td>
</tr>
<tr>
<td>Other external causes</td>
<td>7</td>
<td>12</td>
<td>35</td>
<td>2 years 6 months</td>
<td>F</td>
<td>Caucasian</td>
<td>Divorced</td>
<td>Metro</td>
<td>Low</td>
<td>Cert/Dip</td>
<td>Unemp</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>14</td>
<td>47</td>
<td>1 year 5 months</td>
<td>M</td>
<td>Caucasian</td>
<td>Married</td>
<td>Reg</td>
<td>High</td>
<td>Year 10</td>
<td>FT</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>14</td>
<td>41</td>
<td>1 year 6 months</td>
<td>F</td>
<td>Caucasian</td>
<td>Married</td>
<td>Reg</td>
<td>Low</td>
<td>Year 10</td>
<td>Pension</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>15</td>
<td>58</td>
<td>6 years 6 months</td>
<td>M</td>
<td>Caucasian</td>
<td>Married</td>
<td>Metro</td>
<td>High</td>
<td>H.School</td>
<td>FT</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>15</td>
<td>48</td>
<td>7 years</td>
<td>F</td>
<td>Caucasian</td>
<td>Married</td>
<td>Metro</td>
<td>High</td>
<td>H.School</td>
<td>PT</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>15</td>
<td>46</td>
<td>1 year 6 months</td>
<td>F</td>
<td>Caucasian</td>
<td>Married</td>
<td>Reg</td>
<td>Low</td>
<td>Cert/Dip</td>
<td>FT</td>
</tr>
</tbody>
</table>

1 Age of Child: at time of death
2 Age of parent: at time of child's death
3 Parents' Gender: M=Male, F=Female
4 ARIA+: Accessibility Remoteness Indexes for Areas - Metro=Metropolitan, Reg=Inner and outer regional, Rem=Remote and very remote
5 SEIFA Socio-Economic Indexes for Areas – Low=most and somewhat disadvantaged, Mod=Moderate, neither disadvantaged nor advantaged, High= somewhat and most advantaged
6 Education Level: Cert/Dip=TAFE qualification, H.Degree=higher degree, H.School=High School
7 Employment Status: FT=Full time employment, PT=Part time employment, Unemp=Unemployed
8.3.2 Identified themes

Four broad themes were derived from the PA interview data and are reported here: *The Continuing Bond, Meaning Making, Support, and Unique Reactions*. Three of these broad themes were more finely deconstructed into sub-themes (see Table 8.2).

Table 8.2 Identified Themes and Sub-Themes of Parental Bereavement

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Continuing Bond</td>
<td>A Future Lost</td>
</tr>
<tr>
<td></td>
<td>Life Continues</td>
</tr>
<tr>
<td>Meaning Making</td>
<td>Against the Natural Life Cycle</td>
</tr>
<tr>
<td></td>
<td>Silver Lining</td>
</tr>
<tr>
<td>Support</td>
<td>Immediate vs. Extended Support</td>
</tr>
<tr>
<td>Unique Reactions</td>
<td>Impact on Parental Dyad</td>
</tr>
</tbody>
</table>

Quotes from parents are provided to illustrate each theme. As stipulated in Section 4.2.1.3, in order to ensure the authentic voices of parents were maintained and not misappropriated, quotes are presented in such a way that parents who participated in the current may be able to distinguish themselves while remaining anonymous to the reader (Barnes, 1979).

8.2.2.1 The Continuing Bond

‘The Continuing Bond’ was a prominent theme, regardless of mode of death. Here, bereaved parents maintained a link to their deceased child, which provided a source of comfort. The concept of a continuing bond with their child was demonstrated in the active
language parents used when talking about their child, both in daily conversational life and during the PA interview. During the interviews, parents demonstrated an eagerness to use the opportunity to share insights into what their child was like in ‘life’; the nuances and idiosyncrasies that made their child a unique individual:

“I just saw on the news last night or whatever they were saying how people's looks are now playing the big part in whether you get a job interview and all this sort of thing and I said to [my husband] just, we're lucky all of our kids are good looking [laughs]. So I've included [my daughter] in that as well”. (Suicide, Participant 6)

“I think most parents enjoy talking about their children. It's horrible with a death obviously, but when they've gone...as much as it's a bit difficult to talk about them sometimes, we still like to talk about them”. (OEC, Participant 8)

“The only thing, I wish you were here, so I could show you a picture of him...it would put a bit of a personal touch to it, wouldn't it really?” (OEC, Participant 12)

Parents also demonstrated the continuation of bond by saving keepsakes, establishing memorial awards in their child’s name at their child’s school or within their community, and through personal tattoos. These activities seemed to provide a therapeutic or healing connection to their child and served to assist in integrating the death into their lives, as one parent described:

“I don’t have any tattoos anywhere. But I went and got her name tattooed on my ankle, or on my leg... I think it's just a way of remembering her. If I have to go over it again with somebody I'll do it. I don't want to be the sad sack and also don't want to draw attention. But I just want to say look, that was my daughter, I lost my daughter. It's a memory of her...It's about sort of trying to keep her alive” (Suicide, Participant 5)
8.2.2.1.1 A Future Lost

A common sub-theme to the continuation of bond with their child was recognition of ‘A Future Lost’. Here, parents reflected on the life events and milestones that their child would not experience and those they, in turn, would not be able to experience with their child:

“The things that make me sad is that some of [my son’s] friends now are parents and you see them and go, that could be [my son]” (OEC, Participant 10)

“We had to go through whole scenario of my son having his 18th birthday which should have been her 18th birthday, and the son having his 21st birthday which should have been her 21st birthday. Son learning to drive and getting a job, and you think well what would she be doing now” (Suicide, Participant 5)

The concept of ‘A Future Lost’ was also expressed by parents through the emphatic view that a child’s death, regardless of how it occurred, is a senseless and wasteful loss of life: “He hadn’t done any of the things he wanted to do” (Suicide, Participant 4). However, a subtle difference between modes of deaths was observed in the ways in which parents spoke about this loss. A parent whose child had died by suicide made sure to qualify that these feelings weren’t internalised within their child’s memory in any way: “Oh, definitely, but I don’t blame him for it” (Suicide, Participant 4); whereas this notion was externalised by a parent whose child died by homicide:

 “[My son] was a loss to the world. He really and truly was. He was a good kid with a future. He was going to go we don’t know where. That was taken from every one of us and that’s what angered me so much, that his life was stolen from everybody out in the wide, wide world”. (OEC, Participant 10)
Another sub-theme of ‘The Continuing Bond’ was ‘Life Continues’. The continuation of life, despite their child’s death, was sometimes painfully demonstrated in tangible events; for example, receiving mail addressed to the child after their passing. While parents’ narratives expressed recognition that life continued, competing with this was the feeling that the loss of child was not an event one could ‘get over’. Instead, the death needed to be integrated into their life:

“I'm never going to get over it, but you can't dwell on that. You've just got to keep going. My life's not the same, but life goes on, doesn't it?” (Suicide, Participant 4)

“I will never get over [my son’s] death. I will never get over it and I don’t want to but a lot of the things become easier to actually - to be able to handle...I'll never get over it. I can handle it” (OEC, Participant 10)

For some parents, life continued through social interactions with others:

“Somebody said to me, oh geez, I don't know how you can do it. I said, well what else do you do? What do you do? Sit home all day? What do you do? So getting back to work was probably the best thing, just normality and gets you moving”. (Suicide, Participant 5)

The same parent described the struggle of life continuing despite pain associated with their loss:

“...when I was having those negative feelings. Then I thought shit. You only get one life; you've got to make the most of it. You've got to make yourself happy. There's no use me being miserable. I'm no good to the boys being miserable”. (Suicide, Participant 5)
However, this struggle between happiness and misery was framed within the complexity of feelings such as guilt. While they were still able to enjoy a holiday following their child’s death, Participant 5 still also interpreted this as a betrayal to their child:

“Like, why are we enjoying ourselves and we’ve just lost our daughter? Like we went to Bali, took my younger son to Bali. Why are we out here having a great time in Bali? I feel guilty about this, and that’s an emotion you go through, because you feel guilty. Like, we should have done more and here we are on holidays, it’s not right”. (Suicide, Participant 5)

For some parents, attempts to ‘move on’ were influenced by their perceptions of how other bereaved parents were handling their loss. Rather than being aspirational however, this influence served as image of ‘what-not-to-be’ in their grief:

“My sister-in-law’s sister’s daughter was murdered, and it didn’t matter who she met, she had to tell them that her daughter was murdered. She just never got over it. It didn’t matter who you were. If she met you in the street, the first thing she’d tell you is, my daughter was murdered. You can’t live your life like that. Sadly, [she] died, and they could not find a reason for her death medically when they gave her the autopsy. They could not find a reason why she died. She died of a broken heart, didn’t she? Because when her daughter was murdered, she stopped living, even though she had two beautiful grandchildren”. (Suicide, Participant 4)

“I went to a [support group], and it was just a little community group that set up on a Friday night. So I went to a couple of those meetings. But I didn’t go to very many of them because there were people like in the situation I am now, like five years or eight years down the track, going there, reliving it, talking about it. I kept thinking, I don’t to be like that in five years’ time. I don’t want to forget her. But I don’t want it to be a focus of my life that I’ve got to keep going to meetings and talking about. May be they’ve got a different mindset. May be it was their way of helping other people. I didn’t look it that way. I just saw it as I don’t want to be there down the track. I don’t want to be in that position”. (Suicide, Participant 5)
Some parent’s narratives revealed how the passing of their child continued to influence their thoughts and feelings, on occasion serving to remind them of what was really important: “sometimes I get very impatient with people and their petty problems” (OEC, Participant 11). This was most strongly found within the experience of parenting of surviving children, with the loss of a child reminding them of the importance of expressing love and affection and the continued inclusion of surviving children within the midst of navigating their own grief:

“…it’s very hard when you have a surviving child. It’s hard to know how to actually treat them. Because they are there and you don’t have to worry about them because they’re still there. The fact that everybody used to come around home and would talk about [my son] and not talk about [my other son]… That's one of the things that I say to people ... have you got any other children? Yes. How many times a day do you tell them that you love them? Five, six, seven whatever, treble it and it's still not enough because the surviving child will always feel left out of it and most times they are. Then it's too late later on to try and regain that ground. Well it’s not too late. But it's very hard to try and regain that ground again” (OEC, Participant 10)

Indeed, relationships with partners and surviving children served as a powerful notion in this sub-theme. Here, a parent’s remaining loved ones, and a sense of responsibility to them, fostered a resolve to continue: “I’ve got a son. I’ve got a daughter. I’ve got a husband. I have to look after them. I have to go on”. (Suicide, Participant 4)

8.2.2.2 Meaning Making

Meaning making was the second theme, which centred on a parents’ search for explanation. The search for an explanation seemed more intense for parents whose child died by suicide compared with those whose child died by other external causes. Within the cases of suicide, the need to understand ‘why’ their child had taken their life was a common
element to the narrative of parental bereavement, along with the internalisation of responsibility:

“It wasn’t an accident…I think what makes suicide so much more difficult is you’ve got a perception that she’s got a choice. Like if she was killed in a car accident. I’ve said to people if you like, that’s happened, it's bad, and it's terrible and the result's exactly the same. But with suicide, the perception is that she’s got a choice, and if we would have got help we would have fixed her, and you’ll never know that. So I think that's what makes it that much harder than any other sort of death”. (Suicide, Participant 5)

Acceptance of the cause of death was also difficult for parents bereaved by suicide:

“I don't know, I don't know what was going through his head... I don't know why he did what he did”. (Suicide, Participant 1)

“…because there's this uncertainty about it being suicide and you don't believe it's...you can't accept [it]. You really find it hard to accept that suicide's a legitimate reason”. (Suicide, Participant 5)

These feelings were further compounded by the same parents’ disbelief that their children had a full comprehension of their actions when they took their own life:

“I don't think he knew what he was doing and the consequences of it”. (Suicide, Participant 1)

“...I think she saw death. Like the suicide thing, like I'm going to do this but I'm not really going to die, I'm going to be like this. It didn't really, the reality of it all didn't really get in. ...Like it was a bit like at this moment I'm going to do it, but then tomorrow it's going to be all fine. That's why in a way I wish she would have bloody taken tablets or something so we could have had another chance at it”. (Suicide, Participant 5)

However, regardless of mode of death, most parents expressed denial and disbelief that their child was actually gone both in the immediacy of the event – “…we got the phone call that there had been an accident...We just drove there, not for one moment believing that it would be our son” (OEC, Participant 11) – and at times after the death:
“...you still expect her to come home. We'd sit down and say we'd just feel like she's on camp. She's going to come home, she's going to come home. We'll just leave her bedroom the way it is, she's going to come home... you do have trouble believing that she's not going to come back, yeah. Even now I have dreams and I keep thinking that she's there. You think, but aren't you dead? Then you wake up thinking, she's not dead, she's alive. Then you wake up, and think oh shit, that was only a dream. You have that. That still happens now. That's eight years later. Not frequently. But when it happens it's quite vivid”. (Suicide, Participant 5)

8.2.2.2.1 Against the Natural Life Cycle

The idea that a death of a child is ‘Against the Natural Life Cycle’ was a prominent sub-theme within meaning making for parents regardless of mode of death. Parents were confronted with the difficult task of reconciling the loss of their child with their perception of the natural order of the world. The loss of a child was a complete deviation from parents’ normative expectations and challenged existential assumptions that parents would not outlive their offspring. Here, the symbolic loss of a child’s future is further highlighted. One parent reflected:

“...the point is that according to the rules and regulations, children bury their parents, not the other way around and in this case it was - my mum was 94 when she died and when we went over for mum’s funeral, people were saying, isn't it sad? ...I said, what's to be sad about? She was 94. Think about all the things that she's seen in her life... That was the thing. I was there and my mother had been around for 94 years. I shouldn't have been around to bury my 15-year old son. That's what I think is wrong and so unfair”. (OEC, Participant 10)

This was further complicated by the sudden change in their social role as a parent and how to navigate social interactions following the death of their child:

“...that's a real thing I have a real problem with because it's like not socially acceptable to come out and say - like if you go to a hairdressers and they make conversation, how many children have you got? I
can’t say only one because I can’t deny my daughter. So then they start to ask questions and it just gets too difficult, but I can’t not say I have two children”. (Suicide, Participant 6)

As a consequence of these experiences, the same mother powerfully expressed the impact of parental-kinship on the natural order and sudden role change when she said:

“I just think there's the bond there that that child is literally half of you... When your child's killed you literally feel like someone has killed part of you”. (Suicide, Participant 6)

8.2.2.2 Silver Lining

An attempt to find a ‘Silver Lining’ as a consequence of bereavement was a way that some parents sought to make meaning from their child’s death and assisted these parents in coping with and adapting to their grief:

“I mean, the whole thing of grief is you can either do a couple of things, you can dig a hole and you can jump into it and you can pull the grass over the top and just go it’s not happening, or you can bloody well make sure that something decent comes out of it” (OEC, Participant 10)

“...I've gained something out of this tragedy, that I can feel I can offer things to other people who might lose kids that can be of benefit. I don't know, it is a really terrible way to learn”. (Suicide, Participant 5)

However, despite the good and comfort that can be drawn from these silver linings, it was difficult to reconcile and no real consolation to their loss:

“I've had people come up to me and say there was another person's son had to die to make a difference to the world. Okay, I know who you're talking about but why has it got to be my son that's got to make a difference to the world?” (OEC, Participant 10)
8.2.2.3 Support

Within the data, support was clearly an important component in the narrative of parental bereavement, regardless of mode of death. However, bereaved parents felt that often people did not know how to respond to them. There was a sense that people were afraid of further upsetting the parents; people did not know what to say, or said the wrong thing despite good intentions, and people had misconstructions about grief and trauma:

“At the start, the thing that drove me up the wall was, I know how you feel. People say that purely and simply because they don't know what else to say... No you don't know how I feel... it drove me up the wall... So the offering of condolences has never been a problem except the way people do it”. (OEC, Participant 10)

Participant 10 spoke at length about his feelings that other people had difficulty in providing support and condolences, which inadvertently, lead to feelings of being avoided:

“...you're going to find there are going to be people who - they don't come to see you afterwards. They don't even turn up to the funeral. They don't send you a card because they just don't know how to react. They don't know what to say. So it's not that they don't care about you. It's probably the fact that they care about you so much that they don't want to send anything to you that might upset you. Christ, I've just lost my son. How much more upset can I be? [Laughs] That's the point... People said, we didn't know what to do, we didn't know what to say”. (OEC, Participant 10)

For a parent bereaved by suicide, saying the wrong thing in an effort to lend support was hurtful:

“...people mean well, they don't go out to hurt you, and it's just what they think. My neighbour said, you should be happy he didn't shoot himself, and you'd have all the blood and guts to clean up. Fancy saying that to somebody. That is just disgusting. Another girl said, oh, you should get over it... You've just got to think, they're trying to feel for you, but they're said it wrong, so don't take it to heart”. (Suicide, 4)
One parent wondered whether the age of the child at time of death, or the relative rarity of child death, was an influencing factor here:

“I guess it's because of [my son’s] age...an older person would [be] easier to deal with probably but when it's a younger person some people they couldn't...they never had to deal with it I guess”. (OEC, Participant 12)

For two parents, their faith or spirituality was an important supportive element in their grief process; it provided comfort within the present and hope for the future:

“[I] feel that he's with us in spirit”. (OEC, Participant 11)

“I guess my faith also helps me. We're going to meet again”. (Suicide, Participant 4)

For another parent, the church community provided support and a haven of sorts which wasn’t necessarily linked to religious belief:

“...there was a minister from the [church] who sent us a letter a couple of days after and said, look if I can be of any help to you, give us a yell...he just became such a good friend and a good man, even to the stage where I would just go into his church and sit in the middle of his church because I felt comfortable there...but I'm not religious”. (OEC, Participant 10)

The child’s funeral was an important demonstration of support following their child’s death for some parents:

“At the funeral a couple of mothers came up to me and said well, you don't know me, but I just want to thank you. They had their son there and they said when the child came to the school as a new pupil, [my son] was the one that took them under his wing and introduced them to everybody”. (OEC, Participant 11)

“He had 5000 people there it was just amazing...” (OEC, Participant 12)
Indeed, one parent reflected the importance of support shown through purely attending the funeral when he said:

“…my cousins, and this is cousins they didn't come to the funeral. I mean I couldn’t even remember who was at the funeral, but I know they weren’t there. You think well. I spoke to my mum about it, because it’s my mum's brother. Oh, he gets upset at funerals. I said, well that’s the whole fucking point”. (Suicide, Participant 5)

8.2.2.3.1 Immediate vs. Extended Support

Support in the immediacy of the death and the importance of extended support – in the months and years – after the death were a distinct sub-theme of support within some parents’ grief narrative. As one parent described the days following their child’s death:

“...it's just surreal. It's just exhausting, absolutely exhausting. You've just never been so tired. Because you're not sleeping at night, you're getting inundated with people and you just want them to go home. You don’t want to be rude, but just go home...There's just people coming and all these letters, all these people bringing over bloody drinks for you, their bringing over cooked meals for you, as if you're bloody retarded. I know they mean well, but I don't think they know how else to help. You get stuff in the mail and there'd be big long letters written in it. What I remember the most, and I've used it myself since, is someone sent me a card and just wrote sorry”. (Suicide, Participant 5)

In the immediacy of their child’s suicide, the same parent offered a powerful insight regarding their interaction with formal support services:

“...they said, if you want to go to hospital, get to see somebody about counselling...So we all bundle into this ambulance and go to the [the hospital] and there were these people there...who made a cup of tea. It firstly was way too early for us. Secondly they weren't really - what do they do? Then when it was over, they said oh okay so do you want to get a cab to go home. Here we were a family just lost our daughter, going to sit in a cab with a stranger we don't even know to come home... To me it was just like - no one did it from a nasty perspective. But it was almost cruel...But they said, do you want to go to the hospital
for treatment. I said, well is that what you do? I don't know. You just do what someone said, walk off a cliff, well I'll walk off a cliff if it's going to make it better. I don't know. You've just lost your daughter, you're not thinking”. (Suicide, Participant 5)

Several parents delineated the temporal nature of appropriate support. Ongoing support from family and friends that extended beyond the initial bereavement period was highlighted as an important element of support within the narrative of parental bereavement. Here, support which extended into the months, and indeed years, following their child’s death provided great comfort to bereaved parents and upon reflection was most significant in their ongoing grief narrative:

“...everybody will just come and see you for the week or two. They've all got busy lives. They all feel like they've done what they've got to do...you'll get all this attention...in six months' time, you'll feel really shit because everybody else has moved on and you're still in the place. You can't go and talk to them again about it then” (Suicide, Participant 5).

“...people were coming up to us and offering condolences. The first time I've been over to talk to you or the first time I've seen you since your son was killed. How sorry I am. It's a pretty nice feeling, when people care so long after” (OEC, Participant 10).

Meaningful support was sometimes provided through relatively small gestures, which provided great comfort to parents and served to make them feel their child’s memory remained in the world:

“...my real friends kept ringing me months and months later...That meant more to me than in the moment...Every Christmas he sends me a text, thinking of you. This is like eight years down the track. I know it's a bad time for you now, thinking of you. It's those things, and I actually look forward to that now. I don't know why, it's just I know she hasn't left his memory I suppose. Where everybody else is sort of oh well, she's dead now, let's move on. I'm not judging people on that, it's just the way society is” (Suicide, Participant 5).
In addition, notable sources of support were found in unexpected places, as described by Participant 5:

“The funny thing was, some of the people who - the ones who did care are the least ones you’d expect. Like one was just a workmate, and he kept ringing me months and months later” (Suicide, Participant 5).

8.2.2.3.2 Impact on Parental Dyad

The aspect of simultaneous grief within the parental dyad, and the subsequent impact on their intimate relationship, was a sub-theme of support for the narrative of parental bereavement, regardless of mode of death. The impact of the child’s death on intimate partnerships was varied. For some, the time afterwards was difficult: “A period of really hard getting along together started on [day of son’s death]” (OEC, Participant 10). In contrast, another parent reflected: “we’ve been quite lucky because I believe most relationships sort of fall apart quite a bit whereas I think we’ve gotten probably even closer” (OEC, Participant 9).

Within this sub-theme, parents in a relationship with the child’s other biological parent were required to navigate their own grief with a parent concurrently experiencing the death. The influence of their partner’s current mood impacted on their own grief experience, especially when in varying emotional mindsets. Here, one parent would minimise their feelings, either positive or negative, out of respect for, and protectiveness of, their partner:

“You’d be in a down stage, but your wife wouldn’t, and you’d see her laughing and you’d be down. You’d think, I can’t let it on, because you don’t want to ruin the moment for her. Then may be she’d be a down, and I’d be up, and she’d probably have the same feelings”. (Suicide, Participant 5)
The same parent found this experience to be further complicated by incongruent grieving styles within the parental dyad:

“…the other thing that happened with us was I could go and talk to people about it. To me that was a positive effect. Where my wife wouldn’t talk, she would just keep it in. I think it probably took her longer to get over it…where I’d just tend to talk to people about it and it didn’t matter - it was a matter of just coping that way”. (Suicide, Participant 5)

8.2.2.4 Unique Reactions

The narratives of parents whose child died by suicide revealed some unique reactions to bereavement that were not present for parents whose children died by OEC. While most bereaved parents expressed feelings of internalised responsibility, overall parents bereaved by suicide, conceptualised, and articulated internalised responsibility differently. Other unique reactions for parents bereaved by suicide were feelings of guilt and self-blame, stigma, and rejection. These feelings are discussed below.

Parents whose child died by OEC expressed feelings of responsibility. Here, parents felt a sense of accountability for their child’s safety; for example, a parent who lost their child in a car accident reflected:

“I think in the beginning I think people could have made judgements about why he was out. They didn't really get the full picture. Yeah, why he was out that night and why he was in a car and that sort of thing. You sort of felt yourself explaining...sort of maybe tried to justify that a bit”. (OEC, Participant 11)

For parents who lost their child to suicide, this sense of responsibility was more internalised and framed within intense feelings of guilt and self-blame as reflected by two parents:
“Was I that bad a parent that he couldn't take it anymore?” (Suicide, Participant 1)

“I should have realised what was happening and done more to stop him”. (Suicide, Participant 4)

For Participant 4, this sense of responsibility was so intense that their child’s death was interpreted as personal punishment:

“You think, why did this happen? If you believe in karma, what have I done to deserve that? I don’t know”. (Suicide, Participant 4)

The narratives of parents whose children died by suicide also expressed feelings of guilt which revolved around not having recognised signs of suicidality, such as deliberate self-harm, or taken such behaviour more seriously:

“I look back and I think, how did I not see that wound from the burn”? (Suicide, Participant 3)

“She actually said to us, and this is where I feel a bit - maybe I need to go and see somebody. But at the time we read it as you're hanging around with this other girl who's seeing somebody, so you want to have the same experience so you can talk to her or whatever. Again, in retrospect it was a mistake. But we didn't know any better”. (Suicide, Participant 5)

For one parent who lost their child to suicide, internalised parental responsibility extended to the fear that their surviving children would also take their own lives:

“...because we're then concerned, thinking all your kids are going to suicide”. (Suicide, Participant 5)

Further, the same parent described feelings of internalised responsibility leading to feelings of stigmatisation as to why his child had suicided. Regardless of whether these feelings of stigmatisation were real or simply perceived, for this parent, there were tangible and real negative consequences:
“you get this feeling that your daughter, 13, suicided... people are going to say was she being sexually molested by her dad... You start thinking things like that, which are just weird. Because you know it's not true, but what are the people's perceptions going to be? Because a lot of times you hear that, don't you? ...You think so then people put that together and then put that label on you unfairly if they don't know...”

(Suicide, Participant 5)

Feelings of stigma were also internalised for another parent bereaved by suicide. Here, self-stigmatising behaviour was characterised by a withdrawal from others:

“I've made myself a social outcast...I only cry when I'm by myself. Many a time, I've driven to town and tears have just rolled down my face. But I don't think people have made me a social outcast because of it”. (Suicide, Participant 4)

Indeed, in line with these sentiments, two parents who lost their children to OEC reflected the following:

“I guess in the context of a murder and a suicide, it can often have - people outside can have different thoughts about it. I think people will tend to be very sympathetic about a murder but maybe not so sympathetic about somebody committing suicide. So I guess - I suppose some people - he can't have had a very happy home life if he committed suicide or whatever. Maybe that's right but then people start blaming. Maybe blaming the family. With murder, we had no control over it”. (OEC, Participant 10)

“I guess it would be so much different if a child had suicided that's all I can think you know. [My son’s death] was an accident and yes it was tragic but there were no regrets with us with family wise. So we didn't feel any guilt or blame or anything like that so I guess that's easier for us in a lot of ways yeah than parents who have lost a child through suicide”. (OEC, Participant 12)

Here, lingering stigma and negative connotations that exist around suicide as a cause of death are evident. Indeed, prevailing negative societal attitudes to suicide were also more explicitly evident within the narrative of a parent bereaved by OEC. While
suicide is no longer a criminal act, criminal overtones continue as demonstrated by a parent when they said:

[Q: was someone close to [your child] ever a victim of crime?] “If you call suicide, yeah...that's a crime”. (OEC, Participant 10)

The bereavement narratives of parents whose children died by OEC did not incorporate feelings of rejection. Here, one parent was able to acknowledge the external forces at play within their child’s death:

“It wasn't his fault. No. I wish he was here but I don't blame him for him not being here...[My son] had no control over whether he lived or died and he certainly didn't go to the party to - he went there to have fun with his friends, he didn't go there to die”. (OEC, Participant 10)

In contrast, parents of children who had suicided recognised that their children participated in their deaths in far more tangible ways:

“...she made the decision and she was very clear in what she was doing” (Suicide, Participant 5)

However, these parents also expressed sentiments that perhaps continued living was no longer a choice for their child:

“I believe that he didn't have a choice, that that choice was taken off him from his mental illness, from his mental thoughts. He didn't have a choice, no. I don't believe that at all...that's all he could think about and he couldn't see any other way. He just couldn't”. (Suicide, Participant 4)

“...with suicide, the perception is that she's got a choice...may be she didn't have a choice. But there's a perception there that she did. But you'll never know”. (Suicide, Participant 5)

For one parent whose child died by suicide, it was difficult to accept that their child had not reached out to them:
“It’s so hard to believe that you could feel that way, and not feel that you should reach out to his family”.

(Suicide, Participant 3)

In addition, some parents bereaved by suicide also struggled with a sense of perceived rejection, which extended to their child’s friends, and was a painful after-effect:

“...it really took me a long time to accept this, I didn’t believe it for a very long time, but now I do. He had a big group of friends - close boys who were friends - who grew up with him from pre-school. After he died they didn't want anything to do with us. So I've had nothing to do with them at all, and that's probably them protecting themselves”. (Suicide, Participant 3)

“Sadly, I never heard from him, either. After [my son] died, I never heard a word. That really hurt, because [my son] thought a lot of that boy”. (Suicide, Participant 4)

This was in juxtaposition to the experiences of parents whose children died by OEC:

“It was one year that he passed away last September and the kids all come out in the holidays and we had a sausage sizzle down the creek and stuff like that”. (OEC, Participant 9)

“He did do woodwork because one of his friends finished off his project and brought it around, which everybody had signed it”. (OEC, Participant 11)

8.3.3 Comment on participation in PA interview

The emotional demands, and subsequent potential distress, that may be experienced by individuals participating in interviews about sensitive topics was discussed in Section 4.2.1.2. While not an identified theme, it is pertinent to take the opportunity to describe, at least briefly, the general impression of parents’ experiences of participating in the PA interview. Overall, no parent seemed to experience any unreasonably detrimental effects from participating and, while short breaks were taken and encouraged, participants were able to
cope with emotions evoked during the interviews. Indeed, no interview was stopped due to distress. Participant experiences were consistent with extant literature that has reported that participation affords individuals the opportunity to share their story in a judgement-free environment where they can explore and find meaning (Beskow et al., 1991; Henry & Greenfield, 2009; Shneidman, 2004; Wong, et al., 2010):

“The whole process in a way, how do you say it? A pleasurable pain. Does that make sense? Like because I’m thinking about her. But I knew that, and I’m pleased I did it, because it’s made me think about her again. Otherwise it would have just been another couple of days and I wouldn’t have thought about her. So to me, there’s a positive in that. Much as it has brought up emotions. But it’s also made me feel that I’m closer more connected to her again. So I don’t feel distraught. I don’t feel real upset. I don’t. I feel like I’ve got little bit more clarification, my own thoughts from the questions you’ve asked and answers I’ve given. I tried to be as honest as I can...” (Suicide, Participant 5)

8.4 Discussion

While suicide can be considered a solitary act, there are inevitably loved ones left behind who face the task of integrating the death into their lives (Bartik et al., 2013; Cerel et al., 2008). The exact number of people affected by a suicide is unknown, and initial estimates of a least six people (Shneidman, 1969) have since been suggested to be exceedingly conservative (Berman, 2011; Lukas & Seiden, 2007; Maple et al., 2010; McIntosh, 2003; Wong et al., 2007). Compared to other types of bereavement, individuals bereaved by suicide have been suggested to experience a range of additional deleterious ramifications including feelings of stigmatisation, social isolation, shame, heightened sense of responsibility and guilt, protracted grief, and in some cases an increased risk for suicidality (Bartik et al., 2013; Jordan, 2001; Mitchell et al., 2004; Shear, 2012).
In addition to mode of death, kinship type has been suggested to influence bereavement outcomes (Schneider et al., 2011), with grief following the loss of a child particularly difficult to circumnavigate (Maple, 2005; Stroebe et al., 1993; Wheeler, 1994). Indeed, the parent-child dynamic is anomalous to other relationships (Wheeler, 1994; Maple, 2005). The narratives of parents presented in the current study aimed to explore the grief experiences of parents bereaved by child suicide compared with parents bereaved through OEC.

The unique nature of the parent-child dynamic, and the subsequent impact on bereavement, underscored all parents’ narratives in three interwoven ways. First, parents were required to simultaneously reconcile the loss of their child with the loss of self (Sanders, 1988; Wheeler, 1994); here, the child was viewed as an extension or part of the parent. Second, and as a consequence, parents’ aspirations were typically vested or at least intertwined within their child’s future (Maple et al., 2013). Here, parents expressed a grief attached to the symbolic loss of their child’s future and deprivation of this experience for themselves. Third, and again interconnected, a child’s death resulted in an identity crisis of sorts within their assumed social role of ‘parent’ (Davis, Wortman, Lehman, & Silver, 2000; Maple et al., 2013).

A continued bond to their lost child, expressed in various ways, was an important component in the ongoing grief narrative for parents regardless of mode of death. Traditional grief theorists have previously held that the grief process is accomplished when an individual is able to withdraw attachments to the deceased (Bowlby, 1980; Kubler-Ross, 1969). More recently, models of grief have evolved and now recognise the importance of a continued attachment between the bereaved and deceased (Field & Filanosky, 2010; Maple et al., 2013; Neimeyer, Baldwin, & Gilles, 2006). The narratives of parents included in the current study
lend support to this premise as continued ties to their child, expressed in varied and personal ways, provided solace and facilitated the integration of the death in their continuing lives.

Whilst difficult to conceptualise, meaning making following bereavement can be deconstructed into two main components: ‘search for cognitive mastery’ and ‘search for renewed purpose’ (Wheeler, 2001). Cognitive mastery refers to the search for understanding, which has been fragmented by the death (Wheeler, 2001). Childhood is often regarded as a time of happiness. Child death by any cause presents a confronting paradox to this assumption and challenges existential suppositions about the natural order of life (Braun & Berg, 1994; Kienhorst et al., 1987). This notion was ubiquitous in parents’ grief narratives. When their child died, parents’ understandable order of life and death were fragmented and the need to understand ‘why’ ensued. Meaning making has been considered significant in affecting grief outcomes among individuals bereaved by suicide (Bartik et al., 2013; Jordan & McIntosh, 2011, Wheeler, 2001). For parents bereaved by suicide, difficulties in meaning making arose from struggles in accepting the cause of death and disbelief that their child had full comprehension of the finality and lethality of their actions.

The second component in meaning making – the search for renewed purpose –refers to the integration of the death by finding reasons for continued living and reconciliation of lost future desires and experiences (Maple et al., 2013; Wheeler, 2001). For parents in the current study, their child’s death was articulated as an event that one was unable to ‘get over’ (Participants 4 & 10). Rather, the death was required to be integrated into parents’ continuing lives (Maple et al., 2013). In the reconstruction of meaning, some parents (Participants 5 & 10) attempted to find some positive in their child’s death; for example, altruistic comfort from greater ability in assisting other parents (see also Maple et al., 2013). Remaining relatives also served to provide meaning for continued living, including a shift in priorities.
and an increased gratefulness for their surviving children. This is akin to research regarding post-traumatic growth, which has found that constructive psychological change can occur in individuals following a traumatic event (Zoellner & Maercker, 2006). For parents in the current study, a child’s death continued to be viewed as ‘senseless and wasteful’ loss irrespective of cognitive mastery and acceptance of their child’s passing.

The support of a social network is imperative during bereavement, regardless of the circumstances surrounding the death (Knieper, 1999). Parents’ narratives were centred on a desire to talk about their child; however, most parents felt that other people didn’t want to talk about their child after their passing, or were unsure of how to respond (Maple et al., 2010; Ratnarajah & Maple, 2011). Despite being a universal experience, there is difficulty speaking about death,7 (McKay & Tighe, 2013; Shear, 2012), and this is further complicated in situations where it is a child who has died. Given the relatively rarity of child death and the subsequent aberration of expectations regarding the life course, at least in Western society (Braun & Berg, 1994; Wheeler, 2001; Rando, 1985), people who come in contact with the bereaved may be ill-equipped in dealing with such an event.

In this study, a lack of support from those who the parents would otherwise have expected to be supportive was particularly painful (see also Fiegelman, Jordan, & Gorman 2009; Neimeyer & Jordan, 2002). Importantly, the current study highlighted the temporal nature of support (see also Maple et al., 2010). Grief narratives of parents in the current study showed that support that extended beyond the immediacy of the death and was provided in months and, indeed, years after the death was extremely comforting, albeit relatively rare. In addition, for some parents, perceptions of other similarly-bereaved individuals influenced how they chose to cope and adapt following the end of their child’s life. This highlights that

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7 Ratnarajah & Maple (2011) contend that this is a “culturally influenced norm, and…these generalisations apply to dominant Western cultures” p. 3.
bereavement trajectories are highly individual (Jordan, Fiegelman, McMenany, & Mitchell, 2011). In addition, research findings regarding the impact on the marital dyad following bereavement have been mixed (Dijkstra & Stroebe, 1998; Oliver, 1999). For some parents involved in the current study, their child’s death resulted in difficulties within their intimate relationships; however, for one bereaved parent (Participant 9), the loss created a new sense of closeness to their spouse. Several factors potentially influence the effect of a death on a marital relationship, including incongruent grieving styles and stability and quality of the relationship preceding the child’s death (Oliver, 1999).

Some researchers have suggested that other external causes of death may share greater convergence to suicide bereavement than differences (Dyregrov et al., 2003; Murphy et al., 2003). Reasons suggested for similarities include: the sudden, unexpected nature of these deaths, and the perceived unnaturalness of the death, often including connotations of violence. Indeed, sudden deaths are commonly employed as a comparison group (Ellenbogen & Gratton, 2001), as is the case in the current study. Several aspects of the grief experiences of the parents included in the current study, and discussed thus far, support this premise. However, the grief narratives of parents bereaved by suicide differed to those who lost their child to OEC in a number of key ways.

Some parents of children who died by OEC indicated some feelings of responsibility. Potentially this was due to the perceived legal, emotional, and nurturing accountability of parents toward their offspring (McIntosh, 2003; Range et al., 1985; Schapiro, 1999). However, this sense of responsibility was highly internalised and framed within feelings of guilt among the parents bereaved by suicide. In cases of child suicide, the question of how it could occur is often alluded to in the aftermath, and, frequently, parents are expected to provide these answers (Whitis, 1968). These findings are in line with previous research,
which has found that individuals bereaved by suicide often feel a heightened sense of responsibility and guilt following the suicide death (Jordan, 2001).

For some parents bereaved by suicide, their feelings of internalised responsibility led to feelings of stigmatisation. Prevailing historical stigma is still associated with suicide today (Minois, 1999; Ratnarajah & Maple, 2011), and, as noted by Maple and colleagues (2010), society’s perspectives regarding death impact an individual’s grief experience. Regardless, of whether the stigma felt by this parent was real or perceived (Dunne and Dunne-Maxim, 2003), these feelings added an additional layer of burden to the sequelae of emotional grief reactions. Indeed, the narratives of parents bereaved by OEC were able to recognise that their grief process was not bound by stigma attached to their child’s cause of death. Finally, the narratives of parents bereaved by OEC did not include feelings of rejection by their child’s friends. Indeed, continued contact with their child’s friends was a source of comfort for some parents. Interestingly, the findings of the current study indicated that some parents bereaved by suicide felt socially isolated by the abrupt exclusion from their child’s life, which resulted in feelings of rejection.

8.5 Chapter Summary

The current study contributes to the discussion regarding parental bereavement by exploring the grief narratives of parent’s bereaved through the death of their young children. Previous research suggests that individuals bereaved by suicide form a unique group highly relevant to suicide prevention (Ratnarajah & Maple, 2011; McIntosh, 2003). The current chapter has used thematic analysis to explore the grief experiences of parents whose child died by suicide compared to parents whose child died by other external causes of death. While the grief landscapes of parents bereaved by suicide and other external causes share similarities some key differences emerge. Specifically, parents bereaved by suicide
experience feelings of stigma and internalised responsibility framed within complex feelings of guilt and rejection.
Chapter 9

Discussion

9.1 Introductory Comments

The overall aim of this program of research was to obtain a better understanding of child suicide. In particular, the three components of this thesis sought to examine the demographic, psychiatric, and psychosocial characteristics of suicide among Queensland children younger than 15 years old. A secondary aim of this research was to explore the grief experience of parents following their child’s suicide, compared to parents whose child died by other external causes of death (OEC). These two primary objectives were unpacked into six specific aims and achieved through three components employing both quantitative and qualitative methodologies.

Using data derived from the Child Death Register (CDR), the quantitative study (Component One), presented in Chapter Five, sought to assess the demographic factors associated with child (10-14 years) and adolescent (15-17 years) suicide, compared with children and adolescents who died by OEC in Queensland (Aim 1). In addition, this component also compared the demographic, psychosocial, and psychiatric factors between child suicide (10-14 years) and adolescent suicide (15-17 years) in Queensland (Aim 2).

Given the general over-representation of Indigenous Australians within suicide statistics (De Leo et al., 2011), the quantitative study (Component Two), presented in Chapter Six, compared the current suicide rates of Aboriginal and Torres Strait Islander (referred herein as Indigenous) children and other Australian children in Queensland (Aim 3). Using data derived from the Queensland Suicide Register (QSR), Component Two built on these findings, and the findings of Component One, to more comprehensively investigate the
demographic, psychosocial, and psychiatric factors between Indigenous children who die by suicide, compared with other Australian children (Aim 4).

The third component of this thesis applied a Psychological Autopsy (PA) approach where the information derived from the PA interviews was utilised in two ways. In order to contextualise the quantitative findings of Components One and Two, the demographic, psychosocial, and psychiatric factors of six individual cases of children who died by suicide, compared to six cases of children who died by OEC, were assessed on an idiographic level (presented in Chapter Seven). To aid in the assessment of similarities and differences in the suicidal processes of these children, life charts were constructed for each suicide case (Aim 5). Data derived from the PA interviews was also utilised within the qualitative study, presented in Chapter Eight, which used thematic analysis to explore the grief experience of parents bereaved by child suicide, compared with parents bereaved by OEC (Aim 6).

This chapter will provide an integration of the key findings from the current program of research in relation to the six research aims outlined in Section 3.8. The contribution of these findings to the current state of knowledge regarding child suicide and subsequent parental bereavement will then be discussed. In addition, the implications within a research setting and wider practise are explored, and the strengths and limitations are delineated and discussed. Finally, suggestions for future research are put forward.

9.2 Review of Key Findings in Relation to Research Aims

Rising suicide rates in child suicide have been observed in several countries since the 1960s (De Leo & Evans, 2003; Dervic et al, 2006; Grøholt et al., 1998; Moens et al., 1988). A recent systematic analysis of worldwide child suicide rates in the last two decades showed that there has been a minor decrease in suicide rates in male children and a slight increase in
female children (Kõlves & De Leo, 2014). Despite this, suicide among children younger than 15 years has been a largely neglected group within suicidology. As a result, there is a dearth of knowledge pertaining to risk factors specific to this age group.

### 9.2.1 Comparison of suicides and other external causes of deaths

The systematic literature review (see Section 3.5) demonstrated that empirical research employing the PA and retrospective case-series methodologies regarding suicide among children is limited. Using data derived from the CDR, Chapter Five presented a comparison of child (10-14 years) and adolescent (15-17 years) suicide deaths, compared to deaths by OEC in the same age band. The use of OEC as a comparison group afforded the opportunity to explore the factors associated with children who die by suicide (Berman et al., 2006).

*Research Aim 1: Assess the demographic factors associated with child (10-14 years) and adolescent (15-17 years) suicide, compared to children and adolescents who have died by other external causes of death in Queensland.*

In Queensland, between 2004 and 2012, suicide was the second-leading cause of death of children (10-14 years) and adolescents (15-17 years) after transport accidents. Indigenous children (and adolescents) were significantly more likely to die by suicide than OEC. Moreover, Indigenous children were significantly more likely to die by suicide at age 10 to 14 years compared to Indigenous adolescents age 15-17 years. Children who lived in remote areas were significantly more likely to die by suicide than OEC when compared to children who lived in metropolitan areas. Children who died by suicide were more frequently known to the child protection system (within the three years prior to death), compared to children and adolescents who died by OEC; however, this finding was not statistically
significant. Adolescents who died by suicide were significantly more likely to be known to these types of agencies prior to death, compared to adolescents who died by OEC. Similarly, siblings of adolescents who died by suicide were significantly more likely to be known to the child protection system, compared to siblings of adolescents who died by OEC.

9.2.2 Comparison of suicides of children and adolescents

Extant research has tended to focus on suicides among adolescent and young adults, while studies that do include children have generally grouped children and adolescents together in the analysis and discussion (Beautrais, 2001a; Dervic et al., 2008; Grøholt et al., 1998). However, children and adolescents differ in a multitude of ways – physically, sexually, cognitively, and socially – and therefore these two groups warrant separate attention (Grøholt, et al., 1998; Sarkar et al., 2010). Suicides among children contained within the CDR were compared with adolescent suicides in order to delineate the similarities and differences.

Research Aim 2: Compare the demographic, psychosocial, and psychiatric factors between child (10-14 years) and adolescent (15-19 years) suicide in Queensland.

The most frequent method used by both children and adolescents was hanging. However, adolescents did use more varied methods. Gender asymmetry in suicide increased with age, with suicide becoming more common in male adolescents. A precipitating event in the six months prior to death was identified in the majority of cases for children (79.4%) and adolescents (87%). However, the types of precipitating events varied between children and adolescents. Specifically, compared to adolescents (who died by suicide), children who died by suicide more commonly experienced family problems, such as a parent-child conflict. Adolescents were significantly more likely to experience romantic problems prior to their
suicide. In addition, experience of physical, sexual, or emotional abuse during their lifetime was present in over a third of children and adolescents who died by suicide. Prior to suicide, adolescents were found to consume alcohol significantly more frequently than did children.

Previous suicidality was found in almost half of the children and 60% of the adolescents. More specifically, however, the occurrence of prior suicidal ideation, deliberate self-harm (DSH), and prior suicide attempts were not found to be significantly different between children and adolescents. The incidence of mental health and behavioural difficulties also differed between children and adolescents. Disorders usually diagnosed during infancy, childhood, and adolescence (for example, Attention Deficit and Hyperactivity Disorder, ADHD) were significantly more common among children than adolescents who died by suicide (who were found to experience mood disorders, such as depression, significantly more frequently). In addition, adolescents were significantly more likely to be prescribed medication (psychotropic and non-psychotropic) than children.

9.2.3 Suicide in Indigenous children

Reasons for the over-representation of Indigenous Australians in suicide statistics remain unclear. Several possible explanations have been proposed including intergenerational trauma as a consequence of colonisation and forceful removal, enduring racism and disintegrated cultural identity, poverty, and minimized access to appropriate services (Tatz 2005). To assess the extent of the over-representation of Indigenous children within child suicide, suicide rates of Indigenous children and other Australian children were calculated. The need to systematically explore the factors associated with suicide among Indigenous children was clear. Chapter Six used data derived from the QSR to analyse the suicides of

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8 It is acknowledged here that the definition of ADHD as it relates to this thesis pertains to the DSM-IV. ADHD was updated in the fifth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-5). However, in order to maintain consistent definitions throughout this thesis, ADHD is discussed herein within its DSM-IV context.
Indigenous children (10-14 years), compared with suicides of other Australian children in the same age band.

Research Aim 3: Compare current suicide rates of Aboriginal and Torres Islander and other Australian children (aged 10-14 years) in Queensland.

Between 2000 and 2010, 45 child suicides occurred: 21 Indigenous, and 24 other Australian children. This corresponded to a suicide rate of 10.15 suicides per 100,000 for Indigenous children – 12.63-times higher than the suicide rate for other Australian children (0.80 per 100,000). The highest suicide rates among Indigenous children were for those living in remote areas. Moreover, the suicide rate among Indigenous children living in regional areas (9.54 per 100,000) was significantly higher, compared to other Australian children living in regional areas. These findings indicated a significantly elevated risk of suicide for Indigenous children.

Research Aim 4: Compare the demographic, psychosocial, and psychiatric factors between Aboriginal and Torres Strait Islander child suicide and other Australian child suicide in Queensland.

Several differences emerged when comparing Indigenous children who died by suicide to other Australian children who died by suicide. Indigenous children were significantly more likely to suicide outside the home, compared to other Australian children who most frequently suicided within their usual residence. In addition, Indigenous children were found to be living outside of the parental home at time of death and were significantly less likely to leave a suicide note. Hanging was the predominant method used by all children. Prior to suicide, Indigenous children consumed alcohol significantly more frequently; however, lifetime use of alcohol and/or drugs did not differ. Overall, the presence of any
psychiatric disorder was significantly less common among Indigenous children, compared to other Australian children. In addition, current and past treatment(s) for psychiatric disorders were significantly less common in Indigenous children.

Perhaps surprisingly, given the general over-representation of Indigenous persons in suicide statistics (De Leo et al., 2011), Indigenous and other Australian children did not differ in terms of exposure to suicidal behaviour by family or peers. No differences in communication of suicidal intent or prior suicide attempts, either during the child’s lifetime or in the 12 months prior to death, was found. While other Australian children were found to have displayed an increased interest in suicide through various forms of media more frequently than Indigenous children, this difference did not reach statistical significance. The most common stressful life event for both Indigenous and other Australian children was familial conflict.

9.2.4 Psychological Autopsy: Individual case studies

Given the predominately quantitative focus of the suicidology field, and in order to contextualise the quantitative findings of Components One and Two (Chapters Five and Six respectively), Chapter Seven presented the findings of 12 interviews conducted with parents whose child died before their 16th birthday. The interviews, which applied the PA method, assessed the psychological and physiological health, and social circumstances (including adversity and integration), on an idiographic level, of six children who died by suicide and six children who died by OEC (Cavanagh et al., 2003; Shneidman, 2004). To facilitate the analysis of similarities and differences in suicidal processes among children, individual case study presentations and life charts were constructed.
Research Aim 5: Assess, on an idiographic level, the demographic, psychosocial, and psychiatric factors associated with child (10-15 years) suicides in Queensland as compared to children (10-15 years) who have died by other external causes of death in the same timeframe. Construct pathways to suicide in children using life charts in order to analyse similarities and differences in suicidal processes.

Compared to parents whose child died by OEC, the parents of children who died by suicide more often suspected their child was experiencing a psychiatric disorder. Overall, parents of children who died by suicide reported more behavioural, social, and emotional problems than were typically reported by parents of children who died by OEC. Children who died by suicide were found to display either internalising behaviours (behavioural problems involving over-controlled behaviour) or externalising behaviours (under-controlled, excess, or acting-out behaviour). Once these identified issues were considered within the context of the child’s family, social, and educational life, the number of children with a clinically-diagnosable mental illness (or reasonable conjecture of having a mental illness diagnosis) was small. Children who died by suicide were observed as having had an increased interest and/or preoccupation with death in general (and sometimes suicide more specifically) prior to death through various forms of media. Furthermore, children often communicated suicidal intent prior to death, both implicitly and explicitly.

Adverse life events were more commonly identified in cases of children whose deaths were due to suicide and often these children were dealing with multiple stressors. Parent-child conflict was a common precipitating event prior to suicide; however, perhaps more importantly, these conflicts were often considered relatively minor at the time. School problems, such as truancy, academic difficulties, and bullying were also common among
children who died by suicide and children who died by suicide were found to engage in fewer organisations or participate in smaller social groups.

9.2.5 Parental bereavement

The collateral damage of a suicide extends to those left behind (Cvinar, 2005; Jordan, 2001; McMenany et al., 2008). There is some contention regarding whether bereavement by suicide is quantitatively different to bereavement by other causes of death (Murphy et al., 2003; Séguin et al., 1995). Nonetheless, there is growing agreement that it is qualitatively different to the grief experience of other types of bereavement (Maple et al., 2013).

Furthermore, child deaths are typically characterised as traumatic and have been shown to involve the increased potential for complicated bereavement outcomes (Maple, 2005; Stroebe et al., 1993; Wheeler, 1994). Using data derived from the PA interviews, Chapter Eight presented a thematic analysis of the grief experience of parents whose child died by suicide, compared to parents whose child died by OEC.

Research Aim 6: Explore the grief experience of parents bereaved by child suicide, compared to parents bereaved by other external causes of death.

It appears that there are some similarities in the grief experiences of parents following the death of a child regardless of whether the death was due to suicide or OEC. The unique nature of the parent-child dynamic was an interwoven facet in the narratives of all parents, as a child’s death resulted in parents needing to simultaneously navigate the loss of their child with the loss of self, and the future, as well as the sudden change in their social role of ‘parent’.

Parents, regardless of cause of death, maintained that the loss of their child was not an event that one could ‘get over’. A continuing bond with their child, expressed in varied and
personalised ways, was a source of comfort and served to facilitate the integration of the
death into their continuing lives. Meaning making was difficult, as the death of a child
challenged parents’ own understanding of the natural order of life and death. This was further
compounded for parents whose child took their own life. These parents had difficulties
accepting the cause of death (COD) and felt disbelief that their child had full comprehension
of the implications of their actions. For some parents, finding some positive in their loss, such
as a greater ability to help others, facilitated the meaning making process. Support was
imperative for parents following the loss of their child; however, they often felt they could
not talk about their child or found that others did not know how to respond. Importantly, the
temporal nature of support was important; specifically, support that stretched into the months
and even years after the event provided tremendous comfort and support.

The grief experience of parents of children whose died by suicide differed with the
experiences of parents of children who died by OEC in several ways. Parents of children who
died by suicide had a heightened sense of responsibility, compared to parents whose children
died by OEC. In addition, these feelings of responsibility were highly internalised for parents
bereaved by suicide and framed within intense feelings of guilt and self-blame. This
internalised sense of responsibility also led some parents bereaved by suicide to experience
feelings of stigma. Finally, contrary to parents whose child died by OEC, the grief narratives
of some parents bereaved by suicide incorporated feelings of rejection due to the sudden
exclusion from the their child’s former life and friends.

9.3 Contribution of this Dissertation to Knowledge

Whilst there has been growing research interest in adolescent and youth suicide, few
contemporary researchers have focused specifically on children. The current program of
research aimed to address this gap and has contributed to the evidence-based understanding
of suicide in children younger than 15 years old. Specifically, this thesis has built on the knowledge regarding the psychiatric, psychosocial, environmental, and contextual factors, which are associated with suicide in childhood.

Overall, the incidence of suicide was found to increase with age. Specifically, of the 149 suicides among Queensland children and adolescents during the period 2004 to 2012, over three-quarters were adolescents aged 15-17 (77.2%; compared to children 22.8%). This could be partly explained by the higher incidence of psychopathology among adolescents, compared to children (Brent et al., 1999; Grøholt et al., 1998; Shaffer et al., 1996). In addition, while variable, the onset of puberty (Tanner, 1973; Whincup et al., 2001) has been implicated in increased risk of suicidal behaviour (Shaffer et al., 1996). Indeed, some researchers argue that pubertal maturation is a greater predictor for some mental health disorders than is chronological age (Angold, Costello, Erkanli et al., 1999; Haywood & Sanborn, 2002). Other developmental factors implicated in suicidal behaviour in children include impulsivity, aberrant or immature cognitive capabilities (Pfeffer, 2003), and under-developed social and emotional problem-solving skills (Pfeffer, Hurt, Peskin, & Siefker, 1995). Moreover, Shaffer and colleagues (1996) noted that children appeared to over-estimate the ramifications of precipitating or triggering events.

In many Western countries, rates of suicide mortality are typically higher in males, while suicide morbidity is typically higher in females (Hawton, 2000). Suggested reasons for this gender disparity include, but are not limited to, lethality of methods, differences in suicidal intent and help-seeking behaviour, and normative cultural expectations regarding gender and suicidal behaviour (Beautrais, 2002; Canetto & Sakinofsky, 1998; Hawton, 2000; Milner & De Leo, 2010; Schrijvers, Bollen, & Sabbe, 2012). Overall, in the last two decades, worldwide there has been a minor decrease in suicide rates in male children and a slight
increase in female children aged 10-14 years (Kõlves & De Leo, 2014). The findings of Component One – analysis of the CDR (see Chapter Five) – revealed that gender asymmetry in suicide was less evident among Queensland children. Specifically, male suicides were found to be slightly more prevalent, compared to female; however, this was smaller than previously reported in New Zealand (Beautrais, 2001a), and in Norway (Freuchen et al., 2012b). In short, child suicide within Queensland, Australia, appears to be a significant issue for both boys and girls.

The notion that suicide statistics, across the lifespan, are not an accurate depiction of the true prevalence and incidence of suicide has been an issue of contention within suicidology (De Leo, 2010; O’Donnell & Farmer, 1995). Indeed, underestimation due to under-reporting and/or misclassification has been argued to represent an even greater issue among child suicide figures, compared to adolescents and adults (Crepeau-Hobson, 2010). Several reasons for this were discussed in Section 2.2, including: prevailing historical stigma (De Leo, 2010), coronial reluctance to determine a verdict of suicide in children (Crepeau-Hobson, 2010), the argument that children are precluded from participating in suicidal behaviour due to cognitive immaturity (Pfeffer, 1997), and the potential for suicide methods to be mistaken as accidents (Grøholt & Ekeberg, 2003).

Hanging was found to be the predominant suicide method used by children in the current study. Hanging is less common in older age groups who use more varied methods (De Leo et al., 2013). The low incidence of other methods in children could indicate the possibility of misclassification of other suicide methods which, when used by children are misinterpreted, and subsequently classified incorrectly, as accidents (Grøholt & Ekeberg, 2003; Shaffer, 1974). Indeed, previous research has indicated that children are able to suggest varied and realistic methods of suicide (Mishara, 1999). The possibility of misclassification is
arguably lower in the current research program, however, due to the suicide classification model employed by the CDR and QSR databases (see Section 4.1.1).

A psychiatric disorder potentially heightens an individual’s risk for suicide and this risk is exaggerated when comorbidity exists and other associated factors are also occurring (Apter et al., 2009; Bertolote et al., 2004; Cavanagh et al., 2003; Spirito & Esposito-Smythers, 2006). Children younger than 15 years old who die by suicide have previously been found to exhibit lower rates of psychopathology, compared with adolescents who die by suicide (Brent et al., 1999; Grøholt et al., 1998; Loh et al., 2012; Marttunen et al., 1991; Shaffer et al., 1996). Findings of Component One, with the analysis of the CDR support this premise.

Overall, half of the children who died by suicide were identified as having, or suspected of having, any psychiatric disorder prior to death, compared with almost 60% of adolescents. Specifically, compared to adolescents who died by suicide, disorders usually diagnosed in infancy, childhood, and adolescence (e.g., ADHD) were significantly more frequent; while mood disorders (e.g., depression) were significantly less frequent in children who died by suicide. The overall prevalence of psychiatric difficulties in children contained within the current program of research was higher than previously reported by other child suicide studies (Beautrais, 2001a; Freuchen et al., 2012a, 2012b). The inclusion of children suspected of having a psychiatric disorder, without definite diagnoses, could potentially explain some of these differences.

The fact that psychiatric difficulties do not feature in many cases of child suicide warrants attention. The findings of Component Three indicated that often the emotional and behavioural difficulties suspected by parents were not indicative of a diagnosable psychiatric condition when considered in the child’s family, social, and educational life, and their
developmental context. Potentially, children who did not fulfil the criteria for psychiatric disorders may have had sub-clinical difficulties (Brent, 1995; Brent, Perper, Moritz, Baugher, & Allman, 1993; Foley, Goldston, Costello, & Angold, 2006). Previously, Foley and colleagues (2006) reported that suicidal children aged 16 years and younger, without diagnosable psychiatric disorders, were found to have significantly higher prevalence of sub-threshold disruptive disorders.

Suicide among Indigenous Australians was until recently a relatively infrequent occurrence (Elliott-Farrelly, 2004; Parker, 2010); now suicide rates are consistently higher in Indigenous people, compared to other Australians (De Leo et al., 2011). Component Two – analysis of the QSR – found that, compared to other Australian children who died by suicide, Indigenous children were significantly less likely to be diagnosed with a psychiatric disorder. Moreover, the obtainment of treatment for mental health and behavioural difficulties, prior to suicide, was also significantly less frequent among Indigenous children. These differences could be explained in part by disparities between Western and Indigenous conceptualisations of mental health and social and emotional wellness (Vicary & Westerman, 2004), and behavioural differences in help-seeking (Farrelly, 2008). In addition, lower prevalence of psychiatric disorders and treatment received could reflect the dearth of specialised and culturally appropriate services, especially in remote areas (Hunter, 2007; Mehl-Madrona, 2009; Westerman, 2004; Pridmore, 2009; Vicary & Bishop, 2005). Indeed, the highest suicide rates (33.75 per 100,000) among Indigenous children were found in those living in remote or very remote areas of Queensland.

Empiric research has suggested that, overall, substance abuse is less common in children, compared to adolescents (Marttunen et al., 1991; Shaffer et al., 1996). Moreover, alcohol consumption prior to suicide has been found to occur less frequently in children,
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cmpared to adolescents (Brent et al., 1999; Grøholt et al., 1998; Soole et al., 2014a).

However, this is not the case in suicides among Indigenous children who have been found to consume alcohol prior to their suicide significantly more frequently, compared with other Australian children (Soole et al., 2014b). This may be symptomatic of overall higher rates of harmful alcohol use with Indigenous communities (Australian Institute of Health and Welfare [AIHW], 2011), or be indicative of greater cognitive incapacity at time of suicidal act (Laliberté & Tousignant, 2009).

The majority of children and adolescents had experienced events that could be considered precipitating triggers to suicide. However, there are distinct developmental differences in the type of precipitating events between children and adolescents who die by suicide. For children, familial and interpersonal conflicts, particularly parent-child conflicts, were more frequently present in the six months prior to death. In comparison, romantic problems were significantly more frequent in adolescents. This could reflect adolescents whose “growing impetus for individualisation and autonomy shifts focus to relationships and experiences outside of the family structure” (Soole et al., 2014a, p. 8), while a child’s wellbeing and, indeed basic survival, remains reliant on their caregivers (Pfeffer, 2003).

The positive association between adverse events – such as the experience of physical and sexual abuse, maltreatment, witnessing or experiencing violence – with suicidal behaviour has previously been demonstrated (Brent et al., 1999; Tishler et al., 2007; Séguin et al., 2011). Children in contact with child welfare agencies have also been demonstrated to have an increased risk for suicide attempts and severe psychiatric difficulties in adolescence and young adulthood (Vinnerljung, Hjern, & Lindblad, 2006). Cohen-Sandler and colleagues (1982) offer that suicidal behaviours can function as coping strategies in intolerable home
situations. Indeed, it has been suggested that chronic family discord can be internalised by children as self-destructive tendencies (Pfeffer, 2003; Sabbath, 1969).

Recently, Shin Kim and Leventhal (2008) reviewed existing evidence pertaining to the relationship between suicidal behaviour in children and all bullying behaviour (either as a victim or a perpetrator). The authors concluded that all forms of bullying behaviour were positively associated with increased suicidal ideation and behaviour. However, Shin Kim and Leventhal (2008) stated that cautious interpretation of conclusions was required given the methodological problems of the reviewed studies. For example, the majority of studies neglected to control for potential confounding predictive factors such as those discussed here.

In a study conducted by Freuchen and colleagues (2012b), the association between suicide and bullying was no longer found to be significant once sub-threshold depression was controlled for. As such, they concluded: “it is uncertain what came first, the depressive symptoms or the bullying, but the co-existence is often seen and can be mutually reinforcing” (Freuchen et al., 2012b, p. 10).

Within the quantitative components of the current research program, it was difficult to delineate exposure to bullying (either as a victim or perpetrator) in children who died by suicide during their life. This was because the experience of bullying was not listed separately; rather, it was grouped within either school and educational problems or interpersonal conflicts. However, the PA component (Part One) provided the opportunity to assess the occurrence and impact of bullying of six children who died by suicide. Here, bullying both during the child’s lifetime, and within the six months prior to death, was a common occurrence for children who died by suicide. Types of bullying victimisation ranged from social exclusion, verbal bullying (including name-calling and being the subject of rumours), and physical assault. Bullying can have short-and long-term effects on an
individual’s social, psychological and physical wellbeing (Brank, Hoetger, & Hazen, 2012; River & Noret, 2010). Indeed, exposure to bullying has previously been implicated in suicide attempts later in life (Klomek et al., 2009). As stated by Freuchen and colleagues (2012b): “bullying should be a major concern and a warning sign.” (p. 14).

Historically, children have been regarded as being precluded from contemplating and engaging in suicidal behaviour due to cognitive immaturity. Previous suicidality, however, including ideation, DSH, and/or previous attempts were evident in half of the children included in Component One (see Chapter Five). Analysis of previous suicidality on an idiographic level within Component Three (see Chapter Seven) revealed that these behaviours were often greatly diminished, or even dismissed, as attention-seeking antics. Tragically, the seriousness of these children’s implicit, and explicit, suicidal communication was often only realised in retrospect.

The benefits of framing the factors that may be related to child suicide within Bronfenbrenner’s ecological model were discussed in Section 3.7. As previously stipulated (see Section 1.6), this thesis focused predominately on the microsystem level. As such, the contributions of the findings of the current research program are diagrammatically presented within the various sub-systems of Bronfenbrenner’s ecological model in Figure 9.1.
Figure 9.1. Suicide risk factors in children younger than 15 years old: An integrated ecological framework
9.4 Implications of Results

9.4.1 Within a research realm

The opportunity to explore the suicidal process among Indigenous children on an idiographic level within the PA component was unfortunately not possible. Despite the over-representation of Indigenous children demonstrated in the quantitative components of this thesis, only one parent whose child identified as Indigenous prior to death was involved in the PA study (see Chapter Seven). The inability to interview parents and next of kin (NOK) of Indigenous children was largely impacted by recruitment methods. Section 7.2.4.1.1 indicated that almost half of the NOK of cases involving Indigenous children declined at time of death to be contacted for research purposes. As discussed in Section 7.4, potentially this could be related to current processes around Form 1, and could indicate a need to improve police and Indigenous community interactions (Eversole & Routh, 2005). This could facilitate the completion of the Form 1 and potentially increase Indigenous NOK’s willingness to participate in the future.

In addition, hesitation to participate in research regarding a deceased loved one could reflect cultural differences regarding death and expression of grief (Maher, 1997; McGarth & Phillips, 2008; Spiwak et al., 2012; Westerman, 2001). As Section 4.2.1.2 described, letters to NOK were personalised to include the deceased child’s name. This may not be in line with the cultural protocols of some Indigenous communities who believe an individual’s name should not be used after death (McGarth & Phillips, 2008). Termed the ‘naming taboo’, the name of a deceased person is not to be spoken or written by anybody, Indigenous or not, for varying lengths of time; this is to ensure the spirit of the deceased is not called back to the world (Wake, Martin, & Dineen, 1999).
Two parents of Indigenous children expressed interest in participating in the PA Component; however, the interviews did not eventuate. In one instance, there was difficulty in contacting the parent to arrange a time for the interview and, in the second instance, there was difficulty conducting the interview via telephone. Here, the cultural inappropriateness of the PA interview schedule became apparent. As an illustrative example, during the interview, when ascertaining family dynamics of the child, the parent interpreted ‘sibling’, as extending beyond ‘brother’ and ‘sister’ and also included cousins. Here, a Western conceptualisation of ‘family’ within the interview schedule did not necessarily mirror the Indigenous participant’s construction of family and kinship (Pattel, 2007).

### 9.4.2 Within policy and practice

One commonly-used, and useful, conceptualisation of the prevention of suicide is Gordon’s (1983) operational classification of disease prevention. The various activities and initiatives aimed at reducing the rate of suicide are sub-categorised within a triad of universal, selective, and indicated prevention (Berman et al., 2006). Universal prevention programs target the whole population, while selective programs target sub-groups identified as being at high-risk, or increased risk. Indicated programs target individuals who have displayed significant risk (Gordon, 1983). Generally, a comprehensive approach to suicide prevention will compose of activities and initiatives within each of these levels (Gould et al., 2003; WHO, 2012). An overarching aim of suicide prevention programs is to mitigate risk factors and also promote protective factors (Beautrais, Collings, Ehrhardt, & Henare, 2005). Few systematic reviews regarding the evidence-based effectiveness of prevention activities for suicidal behaviour among children and adolescents exist (see Cusimano & Sameem, 2011; De Silva et al, 2013; Robinson, Hetrick, & Martin, 2011). Nonetheless, the findings of
current research program have several wider implications for clinical practice and for suicide intervention and prevention. These are discussed below.

Restriction of means is a common universal prevention approach. For example, reduction of firearm availability has previously been found to be associated with lower rates of suicide by firearms in children and youth (Brent et al., 1993, Johnson, Krug, & Potter, 2000; Miller et al., 2002; Miller, Barber, White, & Azrael, 2013). Findings of this thesis demonstrated that hanging is the most frequently employed method of suicide by children. Given the relative ease in which one could procure the required materials, the potential to reduce suicides by hanging, by restriction of means, is viewed rather pessimistically (Beautrais, 2000). Indeed, Cantor and colleagues (1996) stated that: “the universality of access to hanging limits the introduction of preventive measures within the general population” (p. 36). Ohberg and colleagues (1995) went so far to say that: “it is impossible to influence the availability of this method, except in specific situations such as prison cells and hospital isolation rooms (p. 42). Regardless, restricting access to means remains an important element of a comprehensive approach to suicide prevention strategy for children and adolescents (Beautrais, 2000).

School provides an obvious opportunity to target children on universal and selective levels (Steele & Doey, 2007). Here, teachers are well placed to recognise changes in a child’s academic and school engagement, as well as behavioural changes (which could exist in the absence of statements of intent) that may indicative for concern (Karaman & Durukan, 2013). ‘Gatekeeper’ programs aim to teach individuals who have regular contact with children about suicide risk factors, mental health first aid, and how to identify pertinent behavioural changes in order to be able to intervene appropriately (Gould & Kramer, 2001).
Empiric research regarding the effectiveness of gatekeeper training among school employees is limited (Gould, Greenberg, & Velting, 2003). However findings are promising – personnel have shown improvements in terms of their knowledge, attitudes, intervention skills, and referral practices (Cusimano & Sameem, 2011; Gould et al., 2003; Issac, Elias, Katz, Belik, & Deane, 2009). Raising awareness within the wider community about acute and chronic contributing factors of suicide is imperative (Maine, Shute, & Martin, 2001). Indeed, a ‘gatekeeper’ has been referred to as “any person to whom troubled people are turning to for help” (Synder, 1971, p. 39). General practitioner doctors (or GPs) can also play an invaluable role in observing manifestations of identified risk factors and appropriately responding to suicidality in children (Steele & Doey, 2007). Indeed, the necessity for the incorporation of mental health services within primary health care provision has been previously highlighted (WHO, 2012).

Mentor-based peer support programs are built on the premise that children and adolescents may be more inclined to turn to their fellow peers than adults (Hazell & King, 1996). The aim of such programs is to educate youth in identifying at-risk peers and increase the probability of informing adults when becoming aware of suicidality in a peer (Kalafat & Elias, 1994). However, as Eckert and colleagues (2003) point out, this will be attenuated if and when the social groups of suicidal children are smaller. These types of programs differentiate from gatekeeper programs in an important way – young people in the peer support roles are not placed in a responsibility of care of a suicidal peer, rather these programs aim to increase protective factors and help-seeking behaviour (Suicide Prevention Australia, 2010). One such program is *Alive and Kicking Goals!* where football is used as a platform aiming to prevent youth suicide and encourage help-seeking behaviour through peer education and training. Importantly, this program is tailored specifically for Indigenous
people. While promising, an empirical evaluation on suicide outcomes of this on-going program has not yet been conducted (Tighe & McKay, 2012).

Case finding through direct suicide risk screening can also be implemented in schools or other community settings (Gould et al., 2003). These types of programs are targeted towards individuals who have significant risk and aim to help identify those requiring indicated support and then follow through with appropriate referral (Gould et al., 2003; Shaffer, Pfeffer, & The Work Shop Group on Quality Issues, 2001). The findings of the current program indicate that children should be asked about their experiences, if any, of suicidal ideation and/or DSH, if experiencing any of the following: increased behavioural, social, and emotional problems; a preoccupation with death or suicide; mental health difficulties; adverse life events; bullying; exposure to suicidal behaviour by family or friends; familial conflict or issues; and, contact with child safety authorities. Moreover, other, additional factors pertinent to Indigenous children include living outside the parental home, alcohol use, and remoteness of residency. The possibility of false-positives of screening is acknowledged; however, as stated by Gould and colleagues (2003): “the seriousness of missing a suicidal individual precludes this…” (p. 395).

Often implicit and explicit statements of suicidal intent were only recognised in retrospect. The findings of the current program of research emphasises that all communication of suicidality by children should be taken seriously and highlights the dangers of underestimating the intensity of children’s emotions by framing them within adult perspectives (Lourie, 1966; McGuire, 1982). Here, it is imperative that adults “listen earnestly to anything [children] want to tell you, no matter what. If you don’t listen eagerly to the little stuff when they are little, they won't tell you the big stuff when they are big, because to them all of it has always been big stuff” (Wallace, 2001, p. 38).
The recognition of mental distress and effective treatment of psychiatric disorders is an important individual level prevention strategy (WHO, 2012). However, knowledge regarding the best ways to utilise and embrace the different avenues children and adolescents communicate their feelings and seek out help and support is needed (Cash, Thelwall, Peck, Ferrell, & Bridge, 2013). Two examples of programs that recognise the ways in which some children and youth prefer to communicate and seek out information are Headspace and Reach Out. Headspace is a youth-friendly medical, mental and allied health care facility aimed at attracting young people looking for help (Headspace, 2014). Reach Out is a web-based program which provides among other things information, online support, and counselling to children and youth (Reach Out, 2014). Ongoing care and support is also required (Gould et al., 2003); follow-up using different avenues such as mobile and internet messages could potentially help youth to remain in contact or increase help seeking behaviour in the future if required (Cash et al., 2013).

Parent-child conflicts appear to be a salient factor for child suicide (Beautrais, 2001a; Coskun et al., 2012; Freuchen et al., 2012a; Grøholt et al., 1998; Hoberman & Garfinkel, 1988; Loh et al., 2012). Moreover, communication has previously been found to be worse between children and their parents in children who died by suicide, compared to children who died in accidents (Freuchen et al., 2012b); even when the impact that psychiatric difficulties can have on communication and relationships is controlled (Gould et al., 1996, 2003). Family-based psychosocial therapies such as increasing problem solving techniques and conflict resolutions may provide opportunities to reduce the impact of such problems (Shaffer et al., 2001).

The importance of the continuing bond and maintaining a connection to a loved one is becoming increasingly recognised both within suicide research (Maple et al., 2010), and
within the wider grief literature (Neimeyer, Prigerson, & Davies, 2002). Therefore, bereaved parents, regardless of how their child’s death occurred, should be encouraged to maintain links to their child through their own personal and individual expression of that bond. Stigma was felt by parents bereaved by suicide – and this stigma still exists in society. Indeed, the negative connotations that can surround suicide as a COD were demonstrated within the parental bereavement study (Component Three, Part Two) by a parent bereaved by OEC. Stigma is a pertinent issue in both suicide prevention and postvention. Research has shown that those bereaved by suicide have an increased risk for complicated grief. Sigma can inhibit individuals who are experiencing suicidality from seeking help and hinder them in finding support and sharing their stories of loss (Ratnarajah & Maple, 2011). It is imperative that people listen with genuine interest and understanding to those who have lost a child to suicide (Ratnarajah & Maple, 2011). For some parents bereaved by suicide, feelings of stigma were internalised and led to self-isolation; therefore, some parents may require assistance in recognising and managing their own cognitions about stigma and suicide as a COD.

The temporal nature of support – that is, support extending into months and years after the death was an important source of comfort for the participants in Component Three (Part Two). It appears that bereaved individuals would be well served by bereavement services and, indeed, personal social networks that continued to reach out to them beyond the immediacy of the death event (Dyregrov et al., 2003; Maple et al., 2010). This may be even more important for individuals who are bereaved by suicide who may be inclined to self-isolate themselves (Dyregrov et al., 2003).

9.5 Strengths and Limitations of Dissertation

Several strengths are associated with the current program of research. First, the research has focussed specifically on children younger than 15 years of age, a neglected
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group in prior suicide research. Analysing children and adolescents separately (Component One) highlighted the key ways in which they differ, thus demonstrating that it is erroneous to continue grouping these two age groups together in research analysis and discussion. Second, the current research program investigated the suicide risk factors unique to Indigenous children (Component Two), a group identified as significantly at risk for suicide. Third, the research utilised different sources of information to supplement the information derived during the PA interviews (Component Three), resulting in more sophisticated PA data. Component Three (Part Two) also provided a platform for bereaved parents to share their stories of loss, a bereaved group that often feels silenced in their grief. Finally, the multi-method design of the current program of research, employing both quantitative and qualitative methodologies, contextualised the quantitative components and allowed the suicidal process among children to be studied on an idiographic level.

Nonetheless, some limitations should be acknowledged. The ability to investigate suicide deaths in comparison to OEC was limited to gender, place of birth, Indigenous status, residency, contact of child (and siblings) with the child protection system (within three years prior to their death), geographical remoteness (as measured by Accessibility/Remoteness Index of Australia Plus; ARIA+), and social and economic conditions (as measured by Socio-Economic Indexes for Areas; SEIFA). This limited the extent of comparative analysis between suicide deaths and OEC able to be conducted.

In addition, as discussed previously the information contained within the CDR and QSR databases relies on the accuracy of external sources such as police or coronial information, government entities, along with the conjecture of next of kin (Soole et al., 2014a, 2014b). The suicide classification method (see Section 4.1.1) developed by the Australian Institute for Suicide Research and Prevention (AISRAP), and employed by the
QSR and CDR, is based on health research criteria, as opposed to Coroner findings, which are utilised by other data bodies such as the Australian Bureau of Statistics (ABS). Arguably, this method may lead to a lower threshold for classifying a death as a suicide (De Leo, Klieve, & Milner, 2006). As such, the CDR and QSR databases are invaluable assessment sources for suicide in cases involving children and represent a particular strength of the study.

Various researchers have discussed the methodological weaknesses of the PA methodology, employed in Component Three. Caveats have included the use of non-validated assessment measures and/or the use of measures that can be inappropriate for administration to proxies (Ang et al., 2006; Pouliot & De Leo, 2006; Renaud et al., 2008; Shafii, et al., 1988). The current study has aimed to mitigate these methodological flaws by using validated measures suitable for assessing children and designed to be administered to parents; these aimed to comprehensively assess psychiatric, psychosocial, and environmental factors derived from existing literature (Knoll, 2008). The measures included in the PA aimed to be exhaustive in nature as research using the PA method has previously been criticised for its almost exclusively psychiatric focus (Hjelemand et al., 2012; Pouliot & De Leo, 2006).

The retrospective nature, and the potentially confounding influence of the passing of time on the reliability and validity of participant recall, is often highlighted as a limitation in studies employing the PA method (Brent et al., 1988). However, some scholars maintain that the reconstruction, and sharing of traumatic events, is neither linear nor simple (Caruth, 1995; Tamas, 2009, 2012). Trauma testimony is described by Felman (1995) as being:

…composed of bits and pieces of a memory that ha[ve] been overwhelmed by occurrences that have not settled into understanding or remembrance, acts that
cannot be construed as knowledge nor assimilated into full cognition, events in excess of our frames of reference (p. 16).

While it is recognised that parents may minimise or withhold information that reflects negatively on their child, their families, or themselves (Barracolough, Bunch, Nelson, & Sainsbury, 1974), cross-referencing with the other data sources (e.g., the QSR and CDR) arguably mitigated the potential for parental bias. Thus, comparison of suicides with OEC should present real differences. Indeed, overall, the impression of the clinical interviewer (i.e., the PhD Candidate) was that parents were able to sit with any discomfort, and were mostly content to speak of negative aspects of their child’s life, behaviour, and their relationship with them.

Hawton and colleagues (1998) noted that response rates for control groups are customarily lower than that of the suicide group. For Component Three, a low response rate was a pervasive problem for both the suicide and OEC groups. Despite the implementation of additional recruitment methods, the final sample size was small, consisting of twelve parents (six bereaved by suicide and six bereaved by OEC). Response rates of parents in previous child PA studies have been variable. They have ranged from 50% in Canada (Renaud et al., 2008), to 72% in the United States (Brent et al., 1999), and 90% in Finland (Marttunen, et al., 1995). This is higher still than response rates in previous PA studies conducted by AISRAP, which have been approximately 50%. The reason for the low response rate in the current program of research may be related to the sensitive nature of the topic under investigation.

Death, in general, and perhaps more specifically suicide and death involving children, has been acknowledged to be a difficult topic to discuss (Braun & Berg, 1994; McKay & Tighe, 2013; Rando, 1985; Shear, 2012; Wheeler, 2001).
The findings of the PA component may be limited by a self-selection bias, which influenced parents’ decision to participate in this type of research (Freuchen et al., 2012a). Whether parents who chose to participate, or indeed their children, differ in some fundamental and important way to parents, and their children, who declined participation, is difficult to speculate; nonetheless, it is important to acknowledge this possibility.

Furthermore, as described in Section 7.2.4.1, current recruitment processes stipulate that in order to be approached about research participation opportunities, NOK are required to have consented (on Form 1) at the time of their child’s death. Potentially, some of the parents who declined at this initial time may become interested in participating in research at a later date. Arguable, the other individual in the parental dyad, that is the parent not listed as NOK on the Form 1, would be interested in participating.

Given the issues discussed thus far, the findings stemming from the PA component, specifically the case studies (see Chapter Seven) and the parental bereavement study (see Chapter Eight) cannot be extrapolated to all cases of child suicide or bereaved parents. However, the PA component was intended to contextualise the quantitative findings of Component One (see Chapter Five) and explore a currently under-researched area on an idiographic level. Here, an in-depth temporal account of six children who died by suicide before their sixteenth birthday was presented. Indeed, the idiographic approach applied within this component allowed “us to do the main business of psychology: the intensive study of the human person” (Leenaars, 2002a, p. 29). Furthermore, Component Three aimed to provide a platform for parents to share their stories of loss, and, indeed, to share what their children were like in life. Stigma associated with suicide can lead bereaved parents feeling “silenced in their grief” (Maple et al., 2010). Indeed, the importance of bereaved individuals being able to engage in dialogue regarding their loved one with others in the grief process has been previously highlighted (Neimeyer, 2003).
9.6 Suggestions for Future Research

Due to the nature of the CDR database, utilised within Component One, information regarding many psychosocial and psychiatric variables were not available for OEC. A national child death register or expansion of state level death register databases to extend beyond the aforementioned demographic variables would be invaluable from a research perspective (Australian Human Rights Commission, 2014). Indeed, until recently, suicides occurring nationwide among children younger than 15 years old were not reported separately and were included only in the national total (ABS, 2014). As pointed out by the Australian and New Zealand Child Death Review and Prevention Group:

…although each jurisdiction has its own legislation, functions, roles and requirements for reporting…a national child death database and national child death reporting is essential for consistent, statistically sound data to provide the evidence for prevention activities and the full range policy development. Current comparisons of causes and rates of child deaths across the jurisdictions, although completed annually and generally comparable, are not standardised or consistent (as cited by Australian Human Rights Commission, 2014, p. 77).

In addition, the ability to compare suicide death with OEC data further affords the opportunity to assess the possibility of misclassification of suicides (Grøholt et al., 1998).

Historically, the inclusion of Indigenous people in research has often been as ‘objects’ (Fredericks, 2008; Rigney, 2001). The consequence of research pertaining to Indigenous people within a Western framework as noted by Rigney (2001) is that:

…versions of Indigenous ‘reality’ are distressingly biased in contemporary
social science. Let me clarify my argument. I am not suggesting Indigenous and non-Indigenous academics are dishonest, or that their research intentions are dishonourable in their construction of Indigenous peoples. Rather, applying Western scientific logic produces inconsistencies. (p. 4).

Indigenous participation in research pertaining to them should be as ‘full participants’. There should be a shared understanding of the research aims, methodologies being implemented, and dissemination of findings (Australian Institute of Aboriginal and Torres Strait Islander Studies [AIATSIS], 2012). Overall, each stage of research should be conducted in a collaborative and reciprocal way between the researcher or research body and Indigenous people and communities (AIATSIS, 2012). The National Health and Medical Research Council (NHMRC) offers several research and ethics guidelines when conducting research with Indigenous people (see NHMRC, 2003). The six values that underscore these guidelines are:

1. Reciprocity
2. Respect
3. Equality
4. Responsibility
5. Survival and Protection
6. Spirit and Integrity acts to bind together the aforementioned values through time – past, present and future (NHMRC, 2003).

One of the most pertinent issues to emerge from the findings of this thesis is that Queensland’s Indigenous child population currently has a disproportional and heightened risk of suicide, compared to other Australian children. The need to further understand the phenomena of child suicide as it relates to Australia’s Indigenous children is paramount. As
stated by Dudgeon and colleagues (2010): “genuine collaborative and equal partnerships in Indigenous health research are critical to enable Aboriginal and Torres Islander people to determine the solutions to close the gap on many contemporary health issues” (p. 81). A larger contribution to the advancement of knowledge in relation to Indigenous child suicide and prevention requires deeper enquiry. While several programs for the general population show promise as culturally appropriate to Indigenous populations, these require additional research and evaluation in their success for Indigenous populations (Australian Institute of Health and Welfare [AIHW], 2013).

Internet use is becoming increasingly proliferated among children and adolescents (Lenhart, Purcell, Smith, & Zickuhr, 2010). Despite age-restrictions on Facebook requiring users to be over 13 years of age (Facebook, 2014), the use of social networking sites is becoming increasingly widespread among children (Boyd, Hargittai, Schultz, & Palfrey, 2011). Previous research has found that social networking sites are used to communicate suicidal behaviours and possible intentions (Cash et al., 2013). There is also evidence to suggest that these types of sites provide a space where individuals feel safe to express sensitive or stigmatising behaviour (Moreno, Egan, & Brockman, 2011; Moreno et al., 2012). In doing so, these sites may be used as a way for children and adolescents to reach out for assistance and support (Cash et al., 2013; McKay, Tighe, & Maple, 2013). As Boyd and colleagues (2010) state “in moving forward to address problematic self-harm content – and youth- generated problematic content more generally – we must begin embracing visibility, both as a source of information from which we can learn and as a potential channel through which we can engage” (p. 31).

The comparison group chosen within PA methodology is driven by the specific questions and hypotheses the research aims to address (Hawton, et al., 1998; Isomesä, 2001).
The informants used within the current research program were parents. Parents have been cited as knowledgeable informants for PA research pertaining to their children (Hawton et al., 1998). Ultimately, this kinship type was chosen because the additional aim of the current program of research was to explore differences in parental grief experiences. Future PA research investigating factors associated with suicide among children (without the additional aim of investigating bereavement differences) could consider using living controls as an additional comparison group (Hawton et al., 1998). This could potentially illuminate additional important characteristics and differences, which could help identify individuals who are at risk of suicide (De Leo et al., 2013). The use of a representative community sample of living children, as an additional comparison group, has been previously utilised with success by Freuchen and colleagues (2012b). This can present other issues however. For example, parents may become concerned about any problems brought to light through participation and issues of confidentiality (Hawton et al., 1998). Moreover, some parents of living controls may not be willing to participate in such a study – the result being that those who do participate may present a sampling bias that would be difficult to determine (Beskow et al., 1990; Hawton et al. 1998).

Arguably, multiple informants for PA interviews regarding children would be highly desirable (Beskow et al., 1990). As demonstrated in the quantitative aspects of this thesis, children who died by suicide were frequently known to child protection agencies prior to death; however, this important sub-group was not adequately represented within the PA component. Parents whose child was known to these agencies prior to death may be less inclined to participate. A more liberal operationalisation of ‘caregiver’, especially in Indigenous communities, extending beyond the biological parent, could potentially navigate this. Additional sources of information, such as interviews with teachers or friends of the
child, could also elucidate important information or complement any information obtained from parents.

The home life of children in contact with child protection services can be characterised by, among other things, disordered attachment to significant others (CCYPCG, 2011). Research suggests that poor attachment to significant others can have harmful ramifications on individuals’ emotional and psychological wellbeing (Strahan, 1995). A longitudinal study conducted by Fergusson and colleagues (2000) followed 1265 New Zealand children, and assessed various suicide risk factors at birth, four months, and then annually thereafter until age 16 years, and then again at age 18 and 21 years. The researchers found that poor parent-child attachment was a significant indicator of suicide ideation and attempts between the ages of 15 and 21 years. Future research may be well served by the inclusion of attachment measures, such as the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987). In addition, investigation regarding attachment could also provide further insight into the saliency of parent-child conflict so commonly featured in child suicide.

The temporal interval between death and interview has also been noted as an influencing factor in the inclination of bereaved relatives to participate (Cooper, 1999). The likelihood of participation by parents bereaved by child and adolescent suicide has been reported to diminish with the passing of time since death (Brent et al, 1998). Contrary to this, parents who participated in the PA component reported an average of 4.9 and 3.6 years for suicide and OEC, respectively, since the death of their child. Given the average time since bereavement for the parents who participated in Component Three, it is unknown if, and how, parents’ grief narratives had changed over time (Maple et al., 2013). Future work could consider a longitudinal design where parents’ ongoing grief narrative is explored.
For example, the concept of ‘a silver lining’ was an important subtheme within some parents’ meaning making, regardless of cause of death. Here, finding a ‘silver lining’ assisted parents in coping with, and adapting to, their grief. Research questions that explore whether there are temporal variations in how parents come to achieve this facet of meaning making could benefit bereavement research. It has also been suggested that a ‘silver lining’ may be found through altruism of participating in suicide research and thus participation is beneficial (Dyregrov et al., 2011). Some researchers even go so far as to advocate that the possibility of this benefit, without contravening ethical conduct (e.g., non-coercion) should be highlighted to potential participants (Williams, Entwisle, Haddow, & Wills, 2008).

Given the significance of meaning making in grief outcomes among individuals bereaved by suicide (Bartik et al., 2013; Jordan & McIntosh, 2011; Wheeler, 2001), it appears pertinent to further investigate the ways in which meaning making is achieved by the bereaved and the ways, if any, this process could be facilitated (Davis et al., 2000). Increased participant numbers in future research could also allow for gender differences – between mothers and fathers – to be explored. Future research could also extend existing knowledge by exploring whether the age of the child, and indeed the parent, at time of death is an influencing factor in parental bereavement outcomes. Moreover, despite the over-representation of Indigenous children in suicide figures, only one parent within the PA study (Component Three, Part Two) identified as Indigenous. Thus, processes to begin to explore and understand the bereavement experiences of Indigenous parents are both warranted and required.

One interesting finding that came from the parental bereavement study is that the death of a child, regardless of COD, created concerns among some parents around their surviving children (contained with Component Three, Part Two). Here, parents articulated the
importance of expressing love and affection to their other children, and the continued inclusion of surviving children in the midst of navigating their own grief. For parents bereaved by suicide, this also included a fear they would lose another child to suicide as well. Additional research regarding sibling grief following a suicide by a child would be beneficial for this important bereaved sub-group (Maple, 2005). Indeed, the siblings of people who have died by suicide have been referred to as the “forgotten bereaved” (Dyregrov & Dyregrov, 2005, p. 714).

Knowledge regarding child suicide also requires further research into additional cognitive factors such as hopelessness (Rickelman & Honfek, 1995). Indeed, hopelessness, where the person struggles to see non-suicidal solutions to problems, has been suggested to be a more predictive factor for suicide than depression (Greydanus, Bacopoulou, & Tsalamanious, 2009). Finally, in addition to understanding and mitigating the risk factors associated with child suicide, a better understanding of protective factors is required (Gould & Kramer, 2001; Gould et al., 2003). Advancing knowledge of protective factors would permit the improvement and the building of coping skills, resilience and help-seeking behaviour in children in order to protect against suicidal behaviour (Gould et al., 2003).

9.7 Concluding Remarks

While previously neglected in suicide research, young children do plan, attempt, and die by suicide. Moreover, most children have acquired a mature understanding of both death and suicide by the age of eight (Mishara, 1998; Tishler et al., 2007). It is imperative that any and all suicidal communications made by children are taken seriously. Globally, suicide is a leading cause of death in children younger than 15 years old and rising rates having been observed in several countries (Kõlves & De Leo, 2014). However, available statistics are subject to potential underestimation and misclassification. This may be due to reluctance to
classify child deaths as suicide, misinterpreting suicide methods as accidents, stigma, and the misconception that children are precluded from engaging in suicidal behaviour due to cognitive immaturity (Crepeau-Hobson, 2010; De Leo, 2010; Groholt & Ekeberg, 2003; Minois, 1999; Pfeffer, 1997). In comparison to international rates, the Australian child suicide rate is lower (Kõlves & De Leo, 2014); the highest number of suicides between 2008 and 2012 occurred in Queensland (along with Victoria; ABS, 2014).

Despite this, extant literature on suicide has predominantly focussed on adolescents and older age groups or grouped children with adolescents in the analysis and discussion of predictive factors (Dervic et al., 2008; Sarkar et al., 2010). Moreover, there have been no comprehensive studies on child suicide in Queensland. The current program of research addressed this research gap and has contributed to the understanding of suicide among children younger than 15 years old. More specifically, the research provided evidence regarding the demographic, psychiatric, and psychosocial factors associated with suicide, compared to children who died by OEC, and delineated some key differences between children and adolescents who die by suicide.

The findings of the current program of research highlight the importance of considering children and adolescents separately within suicidology. Furthermore, the current program of research has extended previous research by employing both quantitative and qualitative methodologies in the investigation of child suicide. The case-studies presented in this thesis allowed the assessment of child suicide to be conducted on an idiographic level, thus contextualising the quantitative findings within an individual-level context.

Suicide rates across all age groups are consistently higher in Australia’s Indigenous population (De Leo et al., 2011). Inter-generational trauma as an effect of colonisation and forced assimilation has been implicated in the increased risk of suicide among Australia’s
Indigenous people (Tatz, 2005). Indeed, overall, suicide is a relatively recent phenomenon among Indigenous people (Elliott-Farrelly, 2004; Parker, 2010). The current program of research sought to investigate the demographic, psychiatric, and psychosocial factors unique to suicide among Indigenous children. A prominent finding of this thesis is that Queensland’s Indigenous child population currently has a disproportional and heightened risk of suicide, compared to other Australian children. Further research, conducted in a culturally-appropriate way is necessary.

The suicide of a child does not end with the suicidal act – inevitably loved ones are left bereaved (Bartik et al., 2013; Cerel et al., 2008). The current research program explored the grief experiences of parents whose child died by suicide, compared to parents whose child died by OEC. The uniqueness of the parent-child dynamic has been implicated in bereavement outcomes and the loss of a child is a particularly traumatic experience (Maple, 2005; Stroebe et al., 1993; Wheeler, 1994). While the loss of a child, regardless of COD, can result in similar grief experiences, parents who lose a child to suicide also experience other unique ramifications. The findings of the current research program have contributed to the discussion regarding parental bereavement by qualitatively exploring the grief landscape of parents bereaved by the suicide of a young child. In addition, the current research program provided parents, a bereaved group who often feels silenced in their grief, a platform to share their stories of loss, and indeed share their stories of their child in life.

Empirically-derived knowledge and understanding of the pathways to suicide, specific to children, is essential for the development and implementation of effective intervention and prevention strategies for children. Findings from the current research program clearly highlight the multifaceted nature of suicide and demonstrate the importance of considering socio-environmental elements in the prevention of child suicide. Consequently, evidence-
based prevention activities and initiatives requiring an integrated effort, involving multiple systems, and addressing the many interrelated factors associated with child suicide, are warranted (Gould & Kramer, 2001). Furthermore, an understanding of the pathways to suicide in children may enhance efforts in the intervention of suicidal behaviour and prevention of these behaviours in adolescence and adulthood (Fortune et al., 2007; Grøholt et al., 1998).
Epilogue

The following epilogue is intended to provide my own personal reflections of my PhD journey:

When I first started my degree, as part of the university ethics application and confirmation process, I was required to research the concept of self-care when studying difficult topics. It made sense to me to consider what the literature said on the issue – seeing what was available on a pragmatic level appealed to my analytical sensibilities. Hawton and colleagues (1998) highlighted that interviewers may find the PA process emotionally difficult, at least at first. Dyregrov and Mitchell (1992) identified coping measures frequently reported by emergency personnel and health care workers involved with children. Here, coping measures included mental preparation and emotionally distancing oneself from aspects of the event. Indeed, Hawton and colleagues (1998) purported that interviewers needed to possess the ability to empathise without becoming too emotionally invested. The opportunity to reflect was frequently reported as the most helpful coping strategy (Dyregrov & Mitchell, 1992).

Some of these coping mechanisms were easier than others to employ with success. For example, I was able to mentally prepare for the fact that an unavoidable sadness would permeate the stories shared by bereaved parents. Debriefing sessions following PA interviews were available as required and encouraged. Limiting emotional investment on the other hand was a bit trickier. At first, I found myself wishing I took on only the aggregate-level analysis of the research. In this (self-preservation) way, I thought perhaps dealing with numbers and data would be easier. Yet when analysing the quantitative components of this thesis, I found myself acutely aware of the fact that each of these ‘numbers’ represented a person. However, my emotional response to this awareness was surprisingly comforting. I read each and every
case included in the quantitative components of this thesis and I realised that I was relieved that I recognised each of these ‘numbers’ as a child: someone’s son or daughter, someone’s sibling, someone’s friend. There is now a melancholy that I humbly carry within myself for each of these children.

Inevitably during the course of my studies, I was asked what my topic was. Depending on the situation I found myself in, my answer ranged from an overarching or deliberately vague response of ‘child psychology’ and the like, to a more specific response of child suicide or suicide in children. Overtime, people’s responses became somewhat predictable. Generally people would comment with protective language of ‘oh that’s rare isn’t it’, or ‘the children mustn’t know what they are doing’. Sadly, another common reaction was laden with language with connotations of stigma and judgement. However, I also found that if you are able to signal to people that you are open to talk about suicide, a topic too often considered taboo, the conversation could continue with openness and gravitas.

Occasionally I would be asked how I could cope, working on such a tough topic as child suicide. I will not hide behind false bravado and claim that I was unaffected. I was, and there were days when the need for self-care was apparent even to me. But despite the fact that this topic is often distressing, there is hopefulness in this type of research. By increasing our understanding of the suicidal process in children we will be better equipped at recognising and helping those children who may be vulnerable. During the evitable mountain of reading I undertook in the first months of my PhD, I came across a quote by Giovanni Margagni, which I scribbled down and referred to often – and it seems befitting to close this chapter, and indeed my PhD journey with it:

“Hic locus est ubi mors gaudet succure vitae” - This is the place where death delights to serve the living.
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Appendix 4.1: Suicide classification Flow Chart (AISRAP)

ANY GIVEN DEATH
Examine cause of death as stated on post mortem.

It is possibly a suicide (e.g. drug toxicity, asphyxia, gunshot).
It is not possibly a suicide (e.g. heart attack).

POSSIBLE
CONTINUE

DO NOT ENTER

YES = PROBABLE
Did the method of death have a high likelihood of being suicide (e.g. intent stated on post mortem; hanging, self-inflicted gunshot wound, carbon monoxide) rather than possibly being a death by illness, accident or homicide?

YES = PROBABLE
Any prior suicidal behaviour or attempts?

YES = PROBABLE
Any history of psychiatric illness?

YES = PROBABLE
Any significant stress (e.g. break up of relationship)?

YES = PROBABLE
Did the deceased make an obvious effort to die (secrecy, complex plan, etc.)?

YES = BEYOND REASONABLE DOUBT
Any witness to the actual suicide event (e.g. saw deceased jump from building)?

YES = BEYOND REASONABLE DOUBT
Was the intent stated (verbally or written)?

CLASSIFICATION = HIGHEST PROBABILITY ACHIEVED
Appendix 4.2: Ethical Clearance Certificate

Griffith UNIVERSITY

<>

HUMAN RESEARCH ETHICS COMMITTEE

ETHICAL CLEARANCE CERTIFICATE

This certificate generated on 09-02-2012.

This certificate confirms that protocol 'Trends and predictors of suicide in Australian children.' (GU Protocol Number CSR/01/11/HREC) has ethical clearance from the Griffith University Human Research Ethics Committee (HREC) and has been issued with authorisation to be commenced.

The ethical clearance for this protocol runs from 24-05-2011 to 12-05-2014. The named members of the research team for this protocol are:

Prof Diego De Leo
Dr Kairi Kölves
Ms Rebecca Soole

The research team has been sent correspondence that lists the standard conditions of ethical clearance that apply to Griffith University protocols.

The HREC is established in accordance with the National Statement on Ethical Conduct on Research Involving Humans. The operation of this Committee is outlined in the HREC Standard Operating Procedure, which is available from www.gu.edu.au/or/ethics.

Please do not hesitate to contact me if you have any further queries about this matter.

Dr Gary Allen
Manager, Research Ethics
Office for Research
G39 room 3.55 Gold Coast Campus
Griffith University
Phone: 3735 5585
Facsimile: 07 5552 9058
Email: g.allen@griffith.edu.au
Appendix 7.1: NOK Interview Schedule – Socio-demographic variables (including Exposure to Suicidal Behaviour [Brent et al, 1987] scale)
Appendix 7.2: Mini International Neuropsychiatric Interview for Children and Adolescents Parent Version (MINI-KID-PL)
Appendix 7.3: Child Behaviour Checklist (CBCL)

Please print

CHILD BEHAVIOR CHECKLIST FOR AGES 6-18

<table>
<thead>
<tr>
<th>CHILD’S FULL NAME</th>
<th>Child’s First</th>
<th>Middle</th>
<th>Last</th>
</tr>
</thead>
</table>

**CHILD’S GENDER**

- [ ] Boy
- [ ] Girl

**TODAY’S DATE**

Mo. _____ Day _____ Year ______

**CHILD’S BIRTHDATE**

Mo. _____ Day _____ Year ______

**FATHER’S TYPE OF WORK**

(Please be specific — for example, auto mechanic, high school teacher, homemaker, labourer, lathe operator, shoe salesman, army sergeant.)

**MOTHER’S TYPE OF WORK**

Please fill out this form to reflect your view of the child’s behaviour even if other people might not agree. Feel free to print additional comments beside each item and in the space provided on page 2. Be sure to answer all items.

**I. Please list the sports your child most liked to take part in.**

*For example: swimming, baseball, skating, skate boarding, bike riding, fishing etc.*

<table>
<thead>
<tr>
<th></th>
<th>Compared to others of the same age, about how much time did he/she spend in each?</th>
<th>Compared to others of the same age, how well did he/she do at each one?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less Than Average</td>
<td>Average</td>
</tr>
<tr>
<td>a.</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>b.</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>c.</td>
<td>[ ]</td>
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</tr>
</tbody>
</table>

**II. Please list your child’s favourite hobbies, activities, and games other than sports.**

*For example: stamps, dolls, books, piano, crafts, cars, computers, singing, etc. (Do not include listening to radio and TV.)*

<table>
<thead>
<tr>
<th></th>
<th>Compared to others of the same age, about how much time did he/she spend in each?</th>
<th>Compared to others of the same age, how well did he/she do at each one?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less Than Average</td>
<td>Average</td>
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<tr>
<td>a.</td>
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<tr>
<td>b.</td>
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<tr>
<td>c.</td>
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</tbody>
</table>

**III. Please list any organisations, clubs, teams or groups you child belonged to.**

<table>
<thead>
<tr>
<th></th>
<th>Compared to others of the same age, how active was he/she in each?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less Active</td>
</tr>
<tr>
<td>a.</td>
<td>[ ]</td>
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<tr>
<td>b.</td>
<td>[ ]</td>
</tr>
<tr>
<td>c.</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
IV. Please list any jobs or chores your child had. For example: paper route, babysitting, making bed, working in store, etc. (Include both paid and unpaid jobs and chores.) Compared to others of the same age, how well did he/she carry them out?

<table>
<thead>
<tr>
<th></th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
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<td>b.</td>
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</tbody>
</table>

V. 1. About how many close friends did your child have? (Do not include brothers & sisters)

- None
- 1
- 2 or 3
- 4 or more

2. About how many times a week did your child do things with any friends outside of regular school hours (Do not include brothers & sisters)

- None
- 1
- 2 or 3
- 4 or more

VI. Compared to others of his/her age, how well did your child:

<table>
<thead>
<tr>
<th></th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
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<td>b.</td>
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<tr>
<td>c.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
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</tbody>
</table>

VII. 1. Performance in academic subjects.

Check a box for each subject that child took

<table>
<thead>
<tr>
<th></th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Reading, English, Language Arts</td>
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</tr>
<tr>
<td>b. History or Social Studies</td>
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<tr>
<td>c. Arithmetic or Math</td>
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<tr>
<td>d. Science</td>
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<tr>
<td>e.</td>
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<tr>
<td>f.</td>
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<tr>
<td>g.</td>
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</tbody>
</table>

Other academic subjects- for example: computer course, foreign language, business. Do not include gym, shop, driver’s ed., or other non-academic subjects

2. Did your child receive special education or remedial services or attend a special class or special school?

- No
- Yes-kind of services, class, or school

3. Had your child repeated any grades?

- No
- Yes-grades and reasons

4. Had your child had any academic or other problems in school?

- No
- Yes-please describe

When did these problems start?

Had these problems ended?  

- No
- Yes-when?

Did your child have any illness or disability (either physical or mental)?

- No
- Yes-please describe

What concerned you most about your child?

Please describe the best things about your child.
Below is a list of items that describe children and youths. For each item that describes your child now or within the past 6 months, please circle the 2 if the item was very true or often true of your child. Circle the 1 if the item was somewhat or sometimes true of your child. If the item was not true of your child, circle the 0. Please answer all items as well as you can, even if some do not seem to apply to your child.

0 = Not True (as far as you know)  1 = Somewhat or Sometimes True  2 = Very True or Often True

<table>
<thead>
<tr>
<th>Item</th>
<th>0</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>Acted too young for his/her age</td>
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<tr>
<td>Drank alcohol without parents' approval (describe):</td>
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<tr>
<td>Argued a lot</td>
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<tr>
<td>Failed to finish things he/she started</td>
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<tr>
<td>There was very little he/she enjoyed</td>
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<tr>
<td>Bowel movements outside toilet</td>
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<tr>
<td>Bragging, boasting</td>
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<tr>
<td>Couldn't concentrate, couldn't pay attention for long</td>
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<tr>
<td>Couldn't get his/her mind off certain thoughts; obsessions (describe):</td>
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<tr>
<td>Couldn't sit still, restless, or hyperactive</td>
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<tr>
<td>Cried a lot</td>
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<tr>
<td>Cruel to animals</td>
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<tr>
<td>Cruelty, bullying, or meanness to others</td>
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<tr>
<td>Daydreamed, or got lost in his/her thoughts</td>
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<tr>
<td>Deliberately harmed self or attempted suicide</td>
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<tr>
<td>Demanded a lot of attention</td>
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<td>Destroyed his/her own things</td>
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<tr>
<td>Destroyed things belonging to his/her family or others</td>
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<tr>
<td>Dishobedient at home</td>
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<tr>
<td>Dishobedient at school</td>
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<tr>
<td>Didn't eat well</td>
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<tr>
<td>Didn't get along with other kids</td>
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<td></td>
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<tr>
<td>Didn't seem to feel guilty after misbehaving</td>
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<tr>
<td>Easily jealous</td>
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<tr>
<td>Broke rules at home, school, or elsewhere</td>
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<tr>
<td>Feared certain animals, situations, or places, other than school (describe):</td>
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<tr>
<td>Feared going to school</td>
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<tr>
<td>Feared he/she might think or do something bad</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
<td>0 = Not True (as far as you know)</td>
<td>1 = Somewhat or Sometimes True</td>
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<td>2</td>
<td>57. Physically attacked people</td>
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<td>58.</td>
<td>Picked nose, skin, or other parts of body (describe):</td>
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<td>2</td>
<td>59. Played with own sex parts in public</td>
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<td>1</td>
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<tr>
<td>2</td>
<td>60. Played with own sex parts too much</td>
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<td>2</td>
<td>61. Poor school work</td>
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<td>2</td>
<td>62. Poorly coordinated or clumsy</td>
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<td>0</td>
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<td>1</td>
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<td>2</td>
<td>63. Preferred being with older kids</td>
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<td>0</td>
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<tr>
<td>2</td>
<td>64. Preferred being with younger kids</td>
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<td>2</td>
<td>65. Refused to talk</td>
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<tr>
<td>66.</td>
<td>Repeated certain acts over and over; compulsions (describe):</td>
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<td>1</td>
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<tr>
<td>2</td>
<td>67. Ran away from home</td>
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<td>0</td>
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<td>1</td>
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<tr>
<td>2</td>
<td>68. Screamed a lot</td>
<td></td>
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<td>1</td>
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<tr>
<td>2</td>
<td>69. Secretive, kept things to self</td>
<td></td>
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<tr>
<td>70.</td>
<td>Saw things that weren't there (describe):</td>
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<tr>
<td>2</td>
<td>71. Self-conscious or easily embarrassed</td>
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<tr>
<td>2</td>
<td>72. Set fires</td>
<td></td>
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<tr>
<td>73.</td>
<td>Sexual problems (describe):</td>
<td></td>
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<tr>
<td>2</td>
<td>74. Showed off or clowning</td>
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<td>1</td>
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<tr>
<td>2</td>
<td>75. Too shy or timid</td>
<td></td>
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<td>0</td>
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<tr>
<td>2</td>
<td>76. Slept less than most kids</td>
<td></td>
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<tr>
<td>77.</td>
<td>Slept more than most kids during day and/or night (describe):</td>
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<td>0</td>
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<tr>
<td>2</td>
<td>78. Inattentive or easily distracted</td>
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<tr>
<td>79.</td>
<td>Speech problems (describe):</td>
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<td>0</td>
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<tr>
<td>1</td>
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<tr>
<td>2</td>
<td>80. Stared blankly</td>
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<tr>
<td>2</td>
<td>81. Stole at home</td>
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<td>0</td>
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<tr>
<td>2</td>
<td>82. Stole outside the home</td>
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<tr>
<td>83.</td>
<td>Stored up too many things he/she didn't need (describe):</td>
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<tr>
<td>0</td>
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<tr>
<td>2</td>
<td>84. Strange behaviour (describe):</td>
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<tr>
<td>85.</td>
<td>Strange ideas (describe):</td>
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<td></td>
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<td>0</td>
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<td>1</td>
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<tr>
<td>2</td>
<td>86. Stubborn, sullen, or irritable</td>
<td></td>
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<tr>
<td>2</td>
<td>87. Sudden changes in mood or feelings</td>
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<tr>
<td>2</td>
<td>88. Sulked a lot</td>
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<td>0</td>
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</tr>
<tr>
<td>2</td>
<td>89. Suspicious</td>
<td></td>
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<td>0</td>
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<tr>
<td>2</td>
<td>90. Swearing or obscene language</td>
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<tr>
<td>91.</td>
<td>Talked about killing self</td>
<td></td>
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<tr>
<td>92.</td>
<td>Talked or walked in sleep (describe):</td>
<td></td>
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<td>1</td>
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<tr>
<td>2</td>
<td>93. Talked too much</td>
<td></td>
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</tr>
<tr>
<td>94.</td>
<td>Teased a lot</td>
<td></td>
<td></td>
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<td>0</td>
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<tr>
<td>2</td>
<td>95. Temper tantrums or hot temper</td>
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<tr>
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<tr>
<td>2</td>
<td>96. Thought about sex too much</td>
<td></td>
<td></td>
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<td>0</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>97. Threatened people</td>
<td></td>
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</tr>
<tr>
<td>98.</td>
<td>Thumb-sucking</td>
<td></td>
<td></td>
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<tr>
<td>0</td>
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<td>1</td>
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<tr>
<td>2</td>
<td>99. Smoked, chewed, or sniffed tobacco</td>
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<tr>
<td>100.</td>
<td>Trouble sleeping (describe):</td>
<td></td>
<td></td>
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<tr>
<td>0</td>
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<td>1</td>
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</tr>
<tr>
<td>2</td>
<td>101. Truancy, skipped school</td>
<td></td>
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</tr>
<tr>
<td>102.</td>
<td>Underactive, slow moving or lacked energy</td>
<td></td>
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<tr>
<td>2</td>
<td>103. Unhappy, sad, or depressed</td>
<td></td>
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</tr>
<tr>
<td>104.</td>
<td>Unusually loud</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105.</td>
<td>Used drugs for nonmedical purposes (don't include tobacco) (describe):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>106.</td>
<td>Vandalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>107.</td>
<td>Wet self during the day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>108.</td>
<td>Wet the bed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>109.</td>
<td>Whining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110.</td>
<td>Wished to be of opposite sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111.</td>
<td>Withdrew, didn't get involved with others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>112.</td>
<td>Worried</td>
<td></td>
<td></td>
</tr>
<tr>
<td>113.</td>
<td>Please write in any problems your child had that were not listed above:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
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<td>1</td>
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</tr>
<tr>
<td>2</td>
<td>114.</td>
<td></td>
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</tbody>
</table>
Appendix 7.4: Stressful Life Events Schedule (SLES)

<table>
<thead>
<tr>
<th>Event</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  My child stopped attending school.</td>
<td>E-1/E-2</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>2  My child changed schools.</td>
<td>E-3</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>3  My child did not get accepted to a school.</td>
<td>E-4</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>4  My child had difficulty with grades or school work.</td>
<td>E-5</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>5  My child did poorly on a major exam.</td>
<td>E-6</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>6  My child tried out for a sports team or club and did not make it.</td>
<td>E-7</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>7  My child fought with someone at school.</td>
<td>E-8</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
</tbody>
</table>

Additional comments
<table>
<thead>
<tr>
<th>Event</th>
<th>Event Description</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>My child was bullied at school or in the neighbourhood.</td>
<td>E-9</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>9</td>
<td>My child had problems with someone at work.</td>
<td>W-2</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>10</td>
<td>My child had problems at work.</td>
<td>W-3</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>11</td>
<td>My child was fired from a job.</td>
<td>W-4</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>12</td>
<td>My child was sexually harassed at school or at work.</td>
<td>W-5</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>13</td>
<td>My child testified in court concerning his/her work/job.</td>
<td>W-6</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>14</td>
<td>My child's job affected other aspects of his/her life.</td>
<td>W-7</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>15</td>
<td>My child applied for a job and did not get hired.</td>
<td>W-8</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>16</td>
<td>I (or my spouse/ex-spouse) had problems at work.</td>
<td>W-9</td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>Event</td>
<td>Check the box if this happened</td>
<td>Month this event occurred</td>
<td>Year this event occurred</td>
<td>How did this affect your child?</td>
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<td></td>
</tr>
<tr>
<td>17 I (or my spouse/ex-spouse) was not home because of work.</td>
<td>W-10</td>
<td>☐</td>
<td></td>
<td>Not at all A little Some-what A lot</td>
<td></td>
</tr>
<tr>
<td>18 I was fired from my job (or my spouse/ex-spouse was fired from his/her job).</td>
<td>W-11</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 I (or my spouse/ex-spouse) was unemployed.</td>
<td>W-12</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Our family had money problems.</td>
<td>M-1</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 There were problems with our house (overcrowded, need for repairs, mice or insects).</td>
<td>H-1</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Our family moved.</td>
<td>H-2</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Our family had problems buying or selling a house.</td>
<td>H-3</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Our home was damaged by fire, flood, storm, tornado, or other event.</td>
<td>H-4</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 Our neighbourhood was not safe (violence, crimes, gangs).</td>
<td>H-5</td>
<td>☐</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Event</td>
<td>Check the box if this event occurred</td>
<td>Month this event occurred</td>
<td>Year this event occurred</td>
<td>How did this affect your child?</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
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<tr>
<td>Additional comments</td>
<td></td>
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</tr>
<tr>
<td>26 My child was a victim of a crime.</td>
<td>C-1</td>
<td></td>
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<tr>
<td>Additional comments</td>
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</tr>
<tr>
<td>27 My child was caught committing a crime.</td>
<td>C-2</td>
<td></td>
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<td></td>
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<tr>
<td>Additional comments</td>
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</tr>
<tr>
<td>28 Someone close to my child (close friend, family member) was a victim of a crime.</td>
<td>C-3</td>
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<td></td>
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<td></td>
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<tr>
<td>Additional comments</td>
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</tr>
<tr>
<td>29 Someone close to my child (close friend, family member) was caught committing a crime.</td>
<td>C-4</td>
<td></td>
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</tr>
<tr>
<td>Additional comments</td>
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<td></td>
</tr>
<tr>
<td>30 My child witnessed a violent crime or some other type of violence.</td>
<td>C-5</td>
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<td></td>
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<tr>
<td>Additional comments</td>
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</tr>
<tr>
<td>31 My child had changes in his/her physical appearance that he/she didn’t like.</td>
<td>HL-1</td>
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<tr>
<td>Additional comments</td>
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</tr>
<tr>
<td>32 My daughter started her menstrual cycle.</td>
<td>HL-2</td>
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<tr>
<td>Additional comments</td>
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<tr>
<td>33 My child was hospitalized or had an operation.</td>
<td>HL-3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Additional comments</td>
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</tr>
<tr>
<td>Event</td>
<td>Check the box if this happened</td>
<td>Month this event occurred</td>
<td>Year this event occurred</td>
<td>How did this affect your child?</td>
<td></td>
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<td>-------------------------------</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>My child had a bad accident or health problems.</td>
<td>HL-4</td>
<td></td>
<td>Not at all</td>
<td>A little</td>
</tr>
<tr>
<td>35</td>
<td>My child had long-term health problems.</td>
<td>HL-5</td>
<td></td>
<td>Not at all</td>
<td>A little</td>
</tr>
<tr>
<td>36</td>
<td>Someone close to my child (family member, close friend) was hospitalized or had an operation.</td>
<td>HL-6</td>
<td></td>
<td>Not at all</td>
<td>A little</td>
</tr>
<tr>
<td>37</td>
<td>Someone close to my child (family member, close friend) had a serious accident or health emergency.</td>
<td>HL-7</td>
<td></td>
<td>Not at all</td>
<td>A little</td>
</tr>
<tr>
<td>38</td>
<td>Someone close to my child (family member, close friend) had health problems.</td>
<td>HL-8</td>
<td></td>
<td>Not at all</td>
<td>A little</td>
</tr>
<tr>
<td>39</td>
<td>Someone close to my child (family member, close friend) received psychiatric treatment.</td>
<td>HL-9</td>
<td></td>
<td>Not at all</td>
<td>A little</td>
</tr>
<tr>
<td>40</td>
<td>Someone close to my child (family member, close friend) tried to hurt or kill themselves.</td>
<td>HL-10</td>
<td></td>
<td>Not at all</td>
<td>A little</td>
</tr>
<tr>
<td>41</td>
<td>My child’s immediate family member (parent, sibling) passed away.</td>
<td>D-1</td>
<td></td>
<td>Not at all</td>
<td>A little</td>
</tr>
<tr>
<td>Event</td>
<td>Event Description</td>
<td>Check the box if this happened</td>
<td>Month this event occurred</td>
<td>Year this event occurred</td>
<td>How did this affect your child?</td>
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<tr>
<td>42</td>
<td>My child’s close relative passed away.</td>
<td>D-2</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>My child’s close friend passed away.</td>
<td>D-3</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>A pet died or ran away.</td>
<td>D-4</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>My child started dating someone or resumed an old relationship.</td>
<td>RR-1</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>My child broke-up with his/her boyfriend/girlfriend.</td>
<td>RR-2</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>My child had relationship problems with his/her boyfriend/girlfriend.</td>
<td>RR-3</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>My child was physically/sexually abused by his/her boyfriend/girlfriend.</td>
<td>RR-4</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>My child broke off an engagement.</td>
<td>RR-5</td>
<td>☐</td>
<td></td>
<td></td>
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<tr>
<td>Event</td>
<td>Event Description</td>
<td>Check the box if this happened</td>
<td>Month this event occurred</td>
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<td>How did this affect your child?</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>50</td>
<td>My child lived with his/her significant other.</td>
<td>RR-6</td>
<td>□</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Additional comments</td>
<td></td>
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<tr>
<td>51</td>
<td>My child had sex for the first time.</td>
<td>RR-7</td>
<td>□</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Additional comments</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>52</td>
<td>My daughter became pregnant.</td>
<td>RR-8</td>
<td>□</td>
<td></td>
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<td></td>
<td>Additional comments</td>
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<tr>
<td>53</td>
<td>My son got someone pregnant.</td>
<td>RR-9</td>
<td>□</td>
<td></td>
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<td></td>
<td>Additional comments</td>
<td></td>
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<tr>
<td>54</td>
<td>My daughter or son’s significant other had an abortion or miscarriage.</td>
<td>RR-10</td>
<td>□</td>
<td></td>
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<td></td>
<td>Additional comments</td>
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<tr>
<td>55</td>
<td>My child told someone that they were homosexual or bisexual.</td>
<td>RR-11</td>
<td>□</td>
<td></td>
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<td></td>
<td>Additional comments</td>
<td></td>
<td></td>
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<tr>
<td>56</td>
<td>One of my child’s parents (including yourself, step parent) had a baby or are expecting a baby.</td>
<td>RR-12</td>
<td>□</td>
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<td></td>
<td>Additional comments</td>
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<tr>
<td>57</td>
<td>Another household member is expecting a baby (not parents).</td>
<td>RR-13</td>
<td>□</td>
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<td></td>
<td>Additional comments</td>
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<td>Event</td>
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</tr>
<tr>
<td>58</td>
<td>Someone new moved into our house.</td>
<td>O-1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>Additional comments</td>
<td></td>
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<tr>
<td>59</td>
<td>Someone moved out of the house.</td>
<td>O-2</td>
<td></td>
<td></td>
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<td></td>
<td>Additional comments</td>
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<tr>
<td>60</td>
<td>My child lived with another family or at a children’s home.</td>
<td>O-3</td>
<td></td>
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<tr>
<td></td>
<td>Additional comments</td>
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<tr>
<td>61</td>
<td>I had problems getting along with my spouse.</td>
<td>O-4</td>
<td></td>
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<td></td>
<td>Additional comments</td>
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<tr>
<td>62</td>
<td>I got a divorce or separated from my spouse.</td>
<td>O-5</td>
<td></td>
<td></td>
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<td></td>
<td>Additional comments</td>
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<tr>
<td>63</td>
<td>I got remarried (or my ex-spouse got remarried).</td>
<td>O-6</td>
<td></td>
<td></td>
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<td></td>
<td>Additional comments</td>
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<td></td>
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</tr>
<tr>
<td>64</td>
<td>My child fought more with me or another parent (including step-parent).</td>
<td>O-7</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>Additional comments</td>
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<tr>
<td>65</td>
<td>My child fought more with a sibling.</td>
<td>O-8</td>
<td></td>
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<td></td>
<td>Additional comments</td>
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<tr>
<td>66</td>
<td>My child’s sibling fought more with a parent (including yourself)</td>
<td>O-9</td>
<td></td>
<td></td>
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<tr>
<td>Event</td>
<td>Check the box if this happened</td>
<td>Month this event occurred</td>
<td>Year this event occurred</td>
<td>How did this affect your child?</td>
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<tr>
<td>or a step-parent).</td>
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Additional comments

<table>
<thead>
<tr>
<th>Event</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>67  My child argued more with other relatives (not parents or siblings).</td>
<td>O-10</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Additional comments

<table>
<thead>
<tr>
<th>Event</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>68  There has been domestic violence in our home.</td>
<td>O-11</td>
<td></td>
<td></td>
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</tbody>
</table>

Additional comments

<table>
<thead>
<tr>
<th>Event</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>69  My child was physically abused.</td>
<td>O-12</td>
<td></td>
<td></td>
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</tbody>
</table>

Additional comments

<table>
<thead>
<tr>
<th>Event</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>70  My child was sexually hurt or abused.</td>
<td>O-13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional comments

<table>
<thead>
<tr>
<th>Event</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>71  My child had an increase in arguments and/or relationship problems with a close friend.</td>
<td>O-14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional comments

<table>
<thead>
<tr>
<th>Event</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>72  My child had problems being liked by classmates.</td>
<td>O-15</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Additional comments

<table>
<thead>
<tr>
<th>Event</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>73  My child stopped talking to a good friend.</td>
<td>O-16</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional comments
<table>
<thead>
<tr>
<th>Event</th>
<th>Event Description</th>
<th>Check the box if this happened</th>
<th>Month this event occurred</th>
<th>Year this event occurred</th>
<th>How did this affect your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>74</td>
<td>My child got really bad news.</td>
<td>O-17 □</td>
<td></td>
<td></td>
<td>Not at all □</td>
</tr>
<tr>
<td>75</td>
<td>My child told someone really bad news.</td>
<td>O-18 □</td>
<td></td>
<td></td>
<td>Not at all □</td>
</tr>
<tr>
<td>76</td>
<td>My child found out he/she was adopted.</td>
<td>O-19 □</td>
<td></td>
<td></td>
<td>Not at all □</td>
</tr>
<tr>
<td>77</td>
<td>My child had problems with family members, close friends, or classmates.</td>
<td>O-20 □</td>
<td></td>
<td></td>
<td>Not at all □</td>
</tr>
<tr>
<td>78</td>
<td>My child ran away from home.</td>
<td>AE-1 □</td>
<td></td>
<td></td>
<td>Not at all □</td>
</tr>
<tr>
<td>79</td>
<td>Did any other problems or important things happen to your child?</td>
<td>AE-2 □</td>
<td></td>
<td></td>
<td>Not at all □</td>
</tr>
</tbody>
</table>

If yes please describe:

1. Additional comments

2. Additional comments

3. Additional comments
Appendix 7.5: Interviewer Safety

Interviewer safety protocol for interviews in non-public places

The Interviewer will trust her/his instincts and clinical judgment about whether or not to agree to a face-to-face interview at a non-public place, cancelling the interview if need be.

The Interviewer has a fully charged mobile phone with a prearranged Colleague's number on speed dial, and with a pre-programmed sms "Interview running late about mins" ready in the mobile. The mobile is set to 'conference' i.e. beeping to alert of incoming calls, and will be at hand during the interview.

Right before entering the site of the interview, the Interviewer calls the Colleague to let them know the exact address and that they are entering now (START).

Once the interview ends and the Interviewer is safely out of the site, she/he calls the Colleague to let her/him know.

Two (2) hours after the initial call (START) from the Interviewer, the Colleague calls the Interviewer.

If the interview is still in progress, the Interviewer will reject the call and send the "Interview running late about mins" sms (entering estimated time) to the Colleague.

After the estimated time the Colleague calls the Interviewer.

If there is no reply, the Colleague will wait five (5) minutes and call again.

If there is no reply, the Colleague will raise the alarm.
Appendix 7.6: Suicide Group Letter

Date

Participant Details

Dear [insert full name],

Thank you for consenting to the Queensland Police Service’s request to forward your contact details to the Australian Institute for Suicide Research and Prevention (AISRAP) for the purpose of participating in a research project regarding your loved one. We would like to sincerely thank you for offering your assistance regarding such an emotional experience.

The Australian Institute for Suicide Research and Prevention (AISRAP) would like to respectfully invite you to participate in an important study examining suicide and other external causes of deaths in children under the age of 15 years (GU Protocol Number CSR/01/11/HREC). The aim of this study is to learn more about the factors surrounding suicide in children, and the differences between suicidal and non-suicidal children (please refer to the enclosed information sheet).

I am aware that parts of this study may not have been the experience of your relative and are not related to you in any way. However, information about your relative’s experiences will assist us in the development of more effective suicide prevention and intervention strategies in Australia.

If you do not wish to be contacted, you can ring and leave a message after 6pm on (07) 3735 1107. Alternatively you can email r.soole@griffith.edu.au. You can also call this number during working hours if you have any queries about the study. If you are interested in participating, no further action is required by you at this time; I will contact you shortly to discuss the project with you, and to answer any questions you may have.

I understand that this might be difficult for you and I would like to thank you for considering this request.

Yours sincerely,

Clinical Interviewer

enc
Appendix 7.7: Suicide Group Information Sheet

Trends and predictors of suicide in Australian children (ARC LP0990918)

Why is this research being conducted?

The Australian Institute for Suicide Research and Prevention (AISRAP) would like to respectfully invite you to participate in an Australian Research Council study “Trends and predictors of suicide in Australian children” examining suicide and other external causes of deaths in children under the age of 15 years. The overall aim of the study is to learn more about the factors surrounding child suicide in Australia. This information is crucial to the future development of more effective suicide prevention and intervention strategies for children.

This study is funded by the Australian Research Council and is being conducted in collaboration with Queensland Health (QH), Queensland Department of Justice, Office of State Coroner (OSF), Department of Education, Training and Employment (DETE) and Queensland Commission for Children and Young People and Child Guardian (QCCYPCG) with a consortium lead by the Australian Institute for Suicide Research and Prevention (AISRAP).

What you will be asked to do?

Should you agree to participate, you will be asked to participate in a face-to-face or telephone interview about the final months of [name]’s life. The interview will be carried out by a clinical interviewer and will be audio-taped. It will cover [name]’s social background, school circumstances, mental and physical health, life events, previous suicide ideation and the final contact that you had with [name]. The interview will also cover your personal experience following the death of [name]. It is estimated that this interview will take AT LEAST two hours and will be done at a mutually agreed upon time and place. If you prefer, the interview can be scheduled over two shorter sessions.

Risks to you

It is possible that you might feel distressed during the interview; however similar interviews that have taken place in Australian and overseas research has shown that most people find that they can cope with this, and that, for many, the interview process can be a very cathartic and supportive one. The interview will be stopped however, if either you or the interviewer feels that it has become too distressing for you. It will only be continued if both you and the interviewer feel capable of doing so. Included with this information pack you will find a list of bereavement services you may contact if you wish. You are also welcome, if you wish to have someone with you during the interview for support.

Your participation is voluntary

It is important to note that your participation in the study is entirely voluntary and you are not obligated to participate in this study in any way. You also have the right to withdraw from the study at any time, without consequence.

Your confidentiality

The information you provide will be remain confidential. However, the results of the study may be published or disclosed to others in a way that will not identify you or the child. The data from this study (including interview materials and audiotape of interview) will be electronically stored on a password protected PC and
the hard copy will be securely stored at the Australian Institute for Suicide Research and Prevention at Griffith University for a period of seven (7) years, after which time it will be securely destroyed.

Questions/further information
If you have any questions, please do not hesitate to contact:

Clinical Interviewer
Ms Rebecca Soole
AISRAP, Griffith University
Phone: (07) 3735 1107

Researchers involved
Prof Diego De Leo, Director, AISRAP, Griffith University
Dr Kairi Kõlves, Senior Research Fellow, AISRAP, Griffith University
Ms Rebecca Soole, PhD Candidate, AISRAP, Griffith University

Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Human Research. If you have any concerns or complaints about the ethical conduct of this research project you should contact the Senior Manager, Research Ethics and Integrity on 3735 5585 or research-ethics@griffith.edu.au and quote GU Protocol Number CSR/01/11/HREC.

Feedback to you
At the completion of this project results of the study will be available for all participants at the website www.gu.edu.au/aisrap.

Privacy Statement
The conduct of this research involves the collection, access and/or use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information consult the University’s Privacy Plan at http://www.griffith.edu.au/about-griffith/plans-publications/griffith-university-privacy-plan or telephone (07) 3735 5585.”
Appendix 7.8: Suicide Group Consent Form

If you wish to participate in this study, please consider the following, once you have read and understood the information package and in particular that:

- You understand that your involvement in this research will include participating in an interview about the final months of [insert name] life in order to find out about the circumstances leading up to the death. The interview will be carried out by a trained clinical interviewer and will be audio taped;
- You understand the risks involved;
- You have had any questions answered to your satisfaction;
- You understand that there will be no direct benefit to you from your participation in this research;
- You understand that your participation in this research is voluntary;
- You understand that if you have any additional questions you can contact the research team;
- You understand that you are free to withdraw at any time, without comment or penalty;
- You understand that you can contact the Senior Manager, Research Ethics and Integrity on 3735 5585 or research-ethics@griffith.edu.au if you have any concerns about the ethical conduct of the project.

If you wish to participate in the study, no further action is required until the Clinical Interviewer calls you to answer any further questions you may have and to obtain your verbal consent to participate, and to arrange a time for the first interview.

Please retain this information material for your future reference.

**If you do NOT wish to participate in this study:**

If you do not wish to participate in this study, you can ring and leave a message **after 6pm on (07) 3735 1107.** Alternatively you can email r.soole@griffith.edu.au. No further action is required.
Appendix 7.9: OEC Group Letter

[OEC Contact details]

[Date]

[Participant Details]

Dear [insert full name],

I appreciate this is a difficult time for you and will understand if you do not wish to turn your mind to the following.

I would like to respectfully invite you to participate in an important study examining suicide and other external causes of deaths in children 15 years and under, which this office is undertaking with a consortium led by the Australian Institute for Suicide Research and Prevention (AISRAP). The aim of this study is to learn more about the factors surrounding suicide in children, and the differences between suicidal and non-suicidal children. The enclosed information sheet contains more information about the study. [Type of death] death victims are a very important group in the study. A comparison allows a better understanding of the differences between children who die by suicide and others who die suddenly due to other causes.

I am aware that parts of this study may not have been the experience of your relative and are not related to you in any way. However, information about your relative’s experiences will assist in developing more effective suicide prevention and intervention strategies in Australia.

AISRAP would like to interview you about [Insert name of deceased] life and how you have been coping with his/her passing. The interview can be done over the telephone by a clinical interviewer and will take at least to two hours. These types of interviews are a commonly used method in suicide research. Research suggests that the experience of interviewees is generally beneficial and positive, allowing an opportunity for individuals to share their story in a nonjudgmental and supportive environment.

If you are interested in participating, please sign the Consent Information form including your contact information and return it in the enclosed prepaid envelope which is addressed to AISRAP, if you agree to participate in the study, Rebecca Soole of AISRAP will then telephone you to arrange the interview and also answer any questions you may have.

I understand that this might be difficult for you and I would like to thank you for considering this request.

Yours sincerely,

State Coroner
Appendix 7.10: OEC Information Sheet

Exploring the experience of those bereaved by the loss of child

(A subproject of Trends and predictors of suicide in Australian children, ARC LP0990918)

Why is this research being conducted?

The Australian Institute for Suicide Research and Prevention (AISRAP) would like to respectfully invite you to participate in an Australian Research Council study “Trends and predictors of suicide in Australian children” examining suicide and other external causes of deaths in children under the age of 15 years. The overall aim of the study is to learn more about the factors surrounding child suicide in Australia. This information is crucial to the future development of more effective suicide prevention and intervention strategies for children. [Type of death] death victims are a very important group in our study. A comparison group allows us to better understand the differences between children who die by suicide and others who die suddenly due to other causes.

This study is funded by the Australian Research Council and is being conducted in collaboration with Queensland Health (QH), Queensland Department of Justice, Office of State Coroner (OSC), Department of Education, Training and Employment (DETE) and Queensland Commission for Children and Young People and Child Guardian (QCCYPGC) with a consortium lead by the Australian Institute for Suicide Research and Prevention (AISRAP).

What you will be asked to do?

Should you agree to participate, you will be asked to participate in a face-to-face or telephone interview about the final months of [insert child’s name] life. The interview will be carried out by a clinical interviewer and will be audio-taped. It will cover [child’s name] social background, school circumstances, mental and physical health, life events, previous suicide ideation and the final contact that you had with [child’s name]. The interview will also cover your personal experience following the death of [child’s name]. It is estimated that this interview will take AT LEAST two hours and will be done at a mutually agreed upon time and place. If you prefer, the interview can be scheduled over two shorter sessions.

Risks to you

It is possible that you might feel distressed during the interview; however similar interviews that have taken place in Australian and overseas research has shown most people find they can cope with this, and, for many, the interview process can be a very cathartic and supportive one. The interview will be stopped however, if either you or the interviewer feels it has become too distressing for you. It will only be continued if both you and the interviewer feel capable of doing so. Included with this information pack you will find a list of bereavement services you may contact if you wish. You are also welcome, if you wish to have someone with you during the interview for support.

Your participation is voluntary

It is important to note your participation in the study is entirely voluntary and you are not obligated to participate in this study in any way. You also have the right to withdraw from the study at any time, without consequence.
Your confidentiality

The information you provide will be remain confidential. However, the results of the study may be published or disclosed to others in a way that will not identify you or the child. The data from this study (including interview materials and audiotape of interview) will be electronically stored on a password protected PC and the hard copy will be securely stored at the Australian Institute for Suicide Research and Prevention at Griffith University for a period of seven (7) years, after which time it will be securely destroyed.

Questions/further information
If you have any questions, please do not hesitate to contact:

Clinical Interviewer

Ms Rebecca Soole
AISRAP, Griffith University
Phone: (07) 3735 1107

Researchers involved

Prof Diego De Leo, Director, AISRAP, Griffith University
Dr Kairi Kõlves, Senior Research Fellow, AISRAP, Griffith University
Ms Rebecca Soole, PhD Candidate, AISRAP, Griffith University

Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Human Research. If you have any concerns or complaints about the ethical conduct of this research project you should contact the Senior Manager, Research Ethics and Integrity on 3735 5585 or research.ethics@griffith.edu.au and quote GU Protocol Number CSR/01/11/HREC.

Feedback to you

At the completion of this project results of the study will be available for all participants at the website www.gu.edu.au/aisrap.

Privacy Statement

The conduct of this research involves the collection, access and/or use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information consult the University’s Privacy Plan at http://www.griffith.edu.au/about-griffith/plans-publications/griffith-university-privacy-plan or telephone (07) 3735 5585.”
Appendix 7.11: OEC Consent Letter

**Exploring the experience of those bereaved by the loss of child**

(A subproject of Trends and predictors of suicide in Australian children, ARC LP0990918)

By signing below, I confirm that I have read and understood the information sheet and in particular that:

- I understand that my involvement in this research will include participating in an interview about the final months of [insert name] life in order to find out about the circumstances leading up to the death. The interview will be carried out by a trained clinical interviewer and will be audio taped;
- I understand the risks involved;
- I understand that there will be no direct benefit to me from my participation in this research;
- I understand that my participation in this research is voluntary;
- I understand that if I have any additional questions I can contact the research team;
- I understand that I am free to withdraw at any time, without comment or penalty;
- I understand that I can contact the Senior Manager, Research Ethics and Integrity on 3735 5585 or research-ethics@griffith.edu.au if I have any concerns about the ethical conduct of the project.
- I agree to participate in the study
- I agree to details of the death being provided to AISRAP by the Office of State Coroner.

**Name of child**

**Date of Birth of Child**

**Name**

**Relationship to child**

**Address**

**Phone Number**

**Signed**

**Date**
Appendix 7.12: Bereavement Group Information Sheet

Exploring the experience of those bereaved by the sudden loss of a child
(A subproject of Trends and predictors of suicide in Australian children)

Who is conducting this research?
This study (GU Ref No: CSR/01/11/HREC) is being conducted by the Australian Institute for Suicide Research and Prevention (AISRAP) at Griffith University in Brisbane. This study is funded by the Australian Research Council and is being conducted in collaboration with Queensland Health (QH), Queensland Department of Justice, Office of State Coroner (OSC), Department of Education, Training and Employment (DETE) and Queensland Commission for Children and Young People and Child Guardian (QCCYPCG).

Why is this research being conducted?
The Australian Institute for Suicide Research and Prevention (AISRAP) would like to respectfully invite you to participate in an Australian Research Council study “Trends and predictors of suicide in Australian children” examining suicide and other external causes of deaths in children under the age of 15 years. The overall aim of the study is to learn more about the differences between children who die by suicide and children who die by other causes.

Who can participate?
It is important that the study includes parents who have lost their child suddenly due to other causes as well as parents who have lost their child by suicide before the age of sixteen. By comparing these two groups, a better understanding of the differences and similarities between children who died by suicide and others who died suddenly due to other causes can be achieved. A comparison group also allows more reliable conclusions and recommendations to be drawn from the findings. Furthermore, it allows us to understand parental grief after sudden death in more detail. This information is crucial to the future development of more effective suicide prevention and intervention strategies for children.

What you will be asked to do?
If you decide to participate, we would like to interview you either face-to-face or by telephone about the final months of your child’s life. The interview will be carried out by a clinical interviewer and will be audio-taped to ensure accurate data collection. It will cover your child’s social background, school circumstances, mental and physical health, life events, any previous suicide ideation and the final contact that you had with your child. The interview will also cover your personal experience following their death. It is estimated that this interview will take AT LEAST two hours and will be done at a mutually agreed upon time and place. If you prefer, the interview can be scheduled over two shorter sessions.

Risks to you
It is possible that you might feel distressed during the interview; however similar interviews that have taken place in Australian and overseas research has shown most people find they can cope with this and, for many, the interview process can be a very cathartic and supportive one. The interview will be stopped however, if either you or the interviewer feels it has become too distressing for you. It will only be continued if both you and the interviewer feel capable of doing so. You are also welcome, if you wish to have someone with you during the interview for support.
Your participation is voluntary
It is important to note your participation in the study is entirely voluntary and you are not obligated to participate in this study in any way. You also have the right to withdraw from the study at any time, without consequence.

Your confidentiality
The information you provide will be remain confidential. However, the results of the study may be published or disclosed to others in a way that will not identify you or the child. The data from this study (including interview materials and audiotape of interview) will be electronically stored on a password protected PC and the hard copy will be securely stored at the Australian Institute for Suicide Research and Prevention at Griffith University for a period of seven (7) years, after which time it will be securely destroyed.

Questions/further information
If you have any questions, please do not hesitate to contact:

Clinical Interviewer
Ms Rebecca Soole
AISRAP, Griffith University
Phone: (07) 3735 1107

Researchers involved
Prof Diego De Leo, Director, AISRAP, Griffith University
Dr Kairi Kõlves, Senior Research Fellow, AISRAP, Griffith University
Ms Rebecca Soole, PhD Candidate, AISRAP, Griffith University

Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Human Research. If you have any concerns or complaints about the ethical conduct of this research project you should contact the Senior Manager, Research Ethics and Integrity on 3735 5585 or research-ethics@griffith.edu.au and quote GU Protocol Number CSR/01/11/HREC.

Feedback to you
At the completion of this project results of the study will be available for all participants at the website www.gu.edu.au/aisrap.

Privacy Statement
The conduct of this research involves the collection, access and/or use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information consult the University’s Privacy Plan at http://www.griffith.edu.au/about-griffith/plans-publications/griffith-university-privacy-plan or telephone (07) 3735 5585.”
Appendix 7.13 Bereavement Group Study Announcement

Exploring the experience of those bereaved by suicide and the sudden loss of a child

(A subproject of Trends and predictors of suicide in Australian children)

This study aims to examine suicide and other external causes of deaths in children 15 years and younger, who resided in Queensland at the time of their passing. The aim of this study is to learn more about the factors surrounding suicide in children, and the differences between children who die by suicide and children who die in other ways. An additional component of the project focuses on the impact of a child’s death on the psychosocial functioning of parent/carer survivors.

**Type of volunteers needed:** Parents or caregivers who have lost a child (15 years or younger) to suicide or other sudden/unexpected death. Parents who have lost a child to causes besides suicide are a very important group in the study. A comparison allows a better understanding of the differences between children who die by suicide and others who die suddenly due to other causes.

Please feel free to pass this invitation on to those who you think may be interested.

**What’s in it for me?** Participants will contribute to a broader understanding of predictive factors surrounding suicide in Australian children in order to develop recommendations for suicide prevention among Australian children under the age of 15 years. Research suggests that the experience of interviewees is generally beneficial and positive, allowing an opportunity for individuals to share their story in a nonjudgmental and supportive environment.

**What would I be asked to do? How much time would it take?** Participants will be asked to take part in an interview about their child’s life and how they have been coping with his/her passing. The interview can be done over the telephone by a clinical interviewer and will take at least two hours. If you prefer, the interview can be scheduled over two shorter sessions. With your permission the interview will be recorded and the information you provide will be remain confidential.

**How can I volunteer or find out more?**
Please contact Rebecca Soole - PhD candidate on (07) 3735 1107 or r.soole@griffith.edu.au
Project Coordinator: Dr Kairi Kõlves (07) 3735 3380 or k.kolves@griffith.edu.au
Australian Institute for Suicide Research and Prevention. Ethics clearance GU Protocol Number CSR/01/11/HREC
Appendix 8.1: Grief Experience Questionnaire (GEQ)

Grief Experience Questionnaire (Barnett & Scott, 1989)

I will be asking you about a number of questions regarding your experience since the death of ......... You may find that some questions asked do not apply to you; for these please let your interviewer know that it is not applicable (i.e. ‘Never’). For those experiences that you do remember, please try to determine how long they lasted. You may find some were brief, while some lasted a long time before they finally stopped. Other items you may find that you are still experiencing. Please try to judge, as best you can, how frequently you experience it after the death of .........

Use these answers unless otherwise indicated:

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Almost Always</th>
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<tr>
<td>1</td>
<td>2</td>
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Since the death of ...... how often did you:

1. Think that you should go see a doctor?

2. Experience feeling sick?

3. Experience trembling, shaking, or twitching?

4. Experience light-headedness, dizziness, or fainting?

5. Experience nervousness?

6. Think that people were uncomfortable offering their condolences to you?

7. Avoid talking about the negative or unpleasant parts of your relationship?

8. Feel like you could not make it through another day?

9. Feel like you would never be able to get over the death?

10. Feel anger or resentment toward your child after the death?

11. Question why your child had to die?

12. Find you could not stop thinking about how the death occurred?

13. Think that your child’s time to die had not come?

14. Find yourself not accepting the fact that the death had happened?
15. Try to find a good reason for the death?

16. Feel avoided by friends?

17. Think that others didn’t want you to talk about death?

18. Feel like no one cared to listen to you?

19. Feel that neighbours and relatives did not offer enough concern?

20. Feel like a social outcast?

21. Think people were gossiping about you and your child?

22. Feel like people were probably wondering what kind of personal problems you and your child had experienced?

23. Feel like others may have blamed you for the death?

24. Feel like the death somehow reflected negatively on you or your family?

25. Feel somehow stigmatized by the death?

26. Think of times before the death when you could have made your child’s life more pleasant?

27. Wished you hadn’t said or done certain things during your relationship with your child?

28. Feel like there was something very important you wanted to make up to your child?

29. Feel like maybe you didn’t care enough about your child?

30. Feel somehow guilty after the death of your child?

31. Feel like your child had some kind of complaint against you at the time of death?

32. Feel that, had you somehow been a different person, your child would not have died?

33. Feel like you had made your child unhappy long before the death?

34. Feel like you missed an early sign which may have indicated to you that your child was not going to alive much longer?

35. Feel like problems you and your child had together contributed to an untimely death?
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<tr>
<td>36. Avoid talking about the death of your child?</td>
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<td>37. Feel uncomfortable revealing the cause of death?</td>
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<td>38. Feel embarrassed about the death?</td>
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<td>39. Feel uncomfortable about meeting someone who knew you and your child?</td>
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<td>40. Not mention the death to people you met causally?</td>
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<td>41. Feel like your child chose to leave you?</td>
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<td>42. Feel deserted by your child?</td>
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<td>43. Feel that the death was somehow a deliberate abandonment of you?</td>
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<td>44. Feel that your child never considered what the death might do to you?</td>
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<td>45. Sense some feeling that your child had rejected you by dying?</td>
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<td>46. Feel like you just didn't care enough to take better care of yourself?</td>
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<td>47. Find yourself totally preoccupied while you were driving?</td>
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<td>48. Worry that you might harm yourself?</td>
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<td>49. Think of ending your own life?</td>
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<td>50. Intentionally try to hurt yourself?</td>
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<td>51. Wonder about your child’s motivation for not living longer?</td>
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<td>52. Feel like your child was somehow getting even with you by dying?</td>
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<td>53. Feel you should have somehow prevented the death?</td>
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<td>54. Tell someone that the cause of death was something different that what it really was?</td>
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<td>55. Feel that the death was a senseless and wasteful loss of life?</td>
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