Kilpatrick, Vernon and Resick, 1979a; 1979b). Other studies have found trauma in the forms of sexual dysfunction (Feldman-Summers, Gordon and Meagher, 1979), depression (Calhoun, Ellis and Atkeson, 1982; Hough and Mayhew, 1985), sleep disorder (Maguire, 1984) and maladapted social adjustment (Resick, Calhoun, Atkeson and Ellis, 1981; Paap, 1981), disconnection with personal possessions (Belk, 1988; Furby, 1978; Lorenz, 1966), anger, anxiety and fear of future victimisation (Burt and Katz, 1984; Genevie, Kaplan, Peck, Struening, Kallos, Muhlin and Richardson, 1987; Maguire, 1980; Maguire and Corbett, 1987; Waller, 1986; Waller and Okihiro, 1978; Walsh, 1980; Wilson, 1986; Winchester and Jackson, 1982). Some studies have even reported reactions to B&E such as headaches, sleep disturbances, nausea and post traumatic stress syndrome (Hough and Mayhew, 1985; Kilpatrick, Saunders, Veronen, Best and Van, 1987; Lurigio, 1987; Maguire, 1980; Waller, 1984; Wirtz and Harrell, 1987). Women and young persons suffered the greatest levels of psychological distress from B&E (Kobayashi and Saito, 1995; Shover, 1991). Repeat victims suffer more acutely than persons who experience only one victimisation (Shaw, 2001; Shaw and Pease, 2000). It has even been found that the criminal justice system can exacerbate recovery. When many victims are recovering the court system can often require them to re-live their victimisation when giving evidence and this can result in further trauma called secondary victimisation (Spalek, 2001). There can be long and short term negative impacts for victims of B&E. The impacts can range from mild levels of stress and anxiety to severe symptoms that have far reaching effects, such as moving house (Dugan, 1999).

B&E victimisation can become a problem for police-public relations (Gill, Hart, Livingstone and Stevens, 1996; Liederbach and Kadleck, 2000; Van Dijk, 2001). Homant, Kennedy and Fleming (1984) found that victims of B&E rate police less favourably than non-victims. The authors suggested that a B&E is not only a crime problem for the police, it is a community relations problem. The study found any negative feelings by victims towards police could be counteracted when police conduct a follow up B&E prevention session with the victims at their home. There are obvious implications for police B&E response policy. Police have started to
recognise that their duty is more than just enforcement of the law and extends to maximising the strength of their bond with society (Quinton, Bland and Miller, 2000). Van Kesteren, Mayhew and Nieuwbeerta (2000) found that 25% of burglary victims in Australia were not satisfied with the police response because in their opinion the police did not do enough, they were not interested, they did not catch the offender and they did not recover any stolen goods. A smaller percentage were dissatisfied because the police were impolite, were slow to arrive or did not keep the victim informed of the progress of their case. Twenty-one percent of the dissatisfied victims would have appreciated receiving some support from a specialised agency. It has been found that police could improve their image and perhaps prevent further victimisation if a B&E prevention-counselling program was adopted (Coupe and Griffiths, 1999). Police have tried methods to reduce the trauma suffered by B&E victims. Nation and Arnott (1991) and Umbrait (1990) found that a program that brought victims of B&E and offenders together as part of a rehabilitation program reduced the anxiety and stress levels of victims. However, Johnson and Merker (1992) found no support for police using victim self-help strategies in an effort to reduce the fear of crime of past victims or non-victims. The next section presents and discusses the traditional policing response and its inadequacy in preventing B&E.

TRADITIONAL POLICING

The use of traditional criminal justice methods to attempt to minimise B&E appears to have had limited success (Goode, 1981; McGagh, 1980) and many of the reported achievements were assessed utilising non-rigorous methodologies (Ekblom and Pease, 1995). According to Rosenbaum (1988), criminological research over many years has shown that the huge increases in budgets and justice personnel have produced a much more efficient system of processing offenders, but there has been little or no crime prevention. Problems with a traditional policing response are demonstrated by Felson (1994) who showed that residences in Los Angeles County could expect an average of 30 seconds of police patrolling per day. In recent years
discontent with traditional control strategies has led to the rise in popularity of multi-agency strategies to prevent crime (CJC, 1999b; Hough and Tilley, 1998a).

Research shows that society has turned to various forms of crime prevention because reactive law enforcement approaches have not worked (Crowe, 1988; Taylor and Hirst, 1995). Crowe reported that in the United States in 1986, only 21% of the twelve million serious crimes committed were solved and only 35% of all criminal victimisations were reported to police. This means the actual solution or clearance rate was between 5% to 7%. Increasing patrols is the main method traditional policing uses to prevent crime, but the National Institute of Law Enforcement and Criminal Justice (1975) found the frequency of police patrols had little influence on overall crime rates. This finding was reinforced by Hough and Tilley (1998b) and Homel (1994) who reported that after a certain level of traditional police activity is reached, additional increases in police activities, such as patrols, have a limited impact on crime. Blake and Coupe (2001), in a rigorous assessment of police response times to burglaries, found that the key factor that predicted the chances of catching a burglar in the act was if the call to the police was made as the burglar was going into a dwelling and not leaving a dwelling. The authors assessed the utility of more police so that response time to burglaries could be reduced and they found that “patrol unit staffing is of little or no importance” (p. 393). Furthermore, the use of increased police patrols can lead to increased harassment of minorities (Holmberg, 2000).

Clear-up rate pressures started to have a negative influence on police activities. Smith and Marshall (1981) investigated unsolved burglaries for special characteristics and found that police detection patterns do not vary by type of premises (affluent or deprived, commercial or residential). However, police detection patterns did vary according to the type of goods stolen and the value of goods stolen. When a B&E resulted in stolen goods of little worth (value or type), the police know they would probably have little success in detecting the offender. To avoid having an unsolved crime police engage in a practice of cuffing or writing-off offences. That is, they avoid putting pen to paper. Instead they calm the victims and
never take official action. Carter (1968), Gold (1970) and Vaz (1965) reported similar problems with differential levels of police service according to economic and social status.

Kube (1987) stated that police should not continually emphasise crime rates as this increases fear of crime, thus reducing quality of life and possibly having a criminogenic influence. As noted above, the traditional reactive response results in a poor clearance rate and may have a negligible deterrent effect. For example, Baker (1994) stated that in the United States the Federal Bureau of Investigation found that 14% of all B&Es are cleared. Sparks, Rocco and Glaser (1979) examined the use of a prevention program. The authors found that traditional reactive policing can at best only ever hope to achieve a clear-up rate of property offenders of approximately 20%. Conklin and Bittner (1973) found the police clear-up rate for 945 burglaries over one year was 4.6%. This poor clear-up rate was common community knowledge and it added to a feeling of helplessness and fear in the community. Friedman, Hakim and Spiegel (1989) found similar results to Conklin and Bittner. Sparks, Rocco and Glaser (1979) argued that a pro-active prevention program would empower the community, reduce their sense of fear and would hopefully assist in the prevention and solving of crimes. Sparks et al. assessed citizen’s fear, before and after, the introduction of a prevention program and found that citizen fear of crime was drastically reduced.

Police and researchers started to recognise the problem of using clear-up rates as a measure of police effectiveness (Riccio and Finkelstein, 1985). This led to the development of new measures of performance. Walsh (1982) stated that B&E, larceny and theft of a motor vehicle account for 90% of all reported crime in the United States and that these areas are where law enforcement agencies performed most poorly in terms of cases cleared. Until prevention is given equal or greater emphasis to clear-up rates, the over use of a predominantly reactive response will continue. Dhiri and Brand (1999), Coupe and Griffiths (1996) and Stockdale, Whitehead and Gresham (1999) all state that police performance measures need to be related to outcomes and effectiveness, not just efficiency and clear-up rates.
Kamalakara Rao (1981) illustrates another shortcoming of the traditional criminal justice system model for dealing with burglars in a study of professional burglars. Many professional burglars work almost 365 days per year and are very skilled and experienced. Once arrested and stigmatised by society they have little chance of getting work and are therefore easily led back into B&E. Wright and Decker (1994) also found that some burglars made it a practice to watch a potential target for some days before breaking in. Nee and Taylor (1988) found 12% of burglars worried about the risk of being caught. Only 26% were slightly worried, 40% did not consider there was any risk and 22% said what risk there was added to the enjoyment and attractiveness of B&E. Ninety-four percent described prison life as tolerable, while 4% of respondents actually described prison as enjoyable.

The problems with the traditional criminal justice model are not restricted to police. The courts and corrections systems as a method for dealing with burglars are also proving to be less than effective. Springer (1983) found that legislators had a marginal influence on offenders by using determinate sentencing. He found that the offender’s immediate environment outweighed any other influences. Researchers have also found problems with the way burglars are sentenced. Haynes and Larsen (1984) found that when highly recidivist burglars were sentenced to jail and low rate offenders were put on probation, the mean cost of probation was $16,000 more than the cost of equivalent incarceration. In contrast, Gray and Olson (1989) found results in the opposite direction. They found probation to be around $9,000 less than equivalent imprisonment. All the researchers got together to compare their results. Gray, Larsen, Haynes and Olson (1991) found that the Haynes and Larsen study did not factor in the cost benefit from rehabilitation. Haynes and Larsen countered this argument by stating that rehabilitation did not occur after imprisonment. Offenders committed the same or more crime after imprisonment, but they were just caught less often as they learned in prison how to better commit B&E and get away by leaving fewer clues.

It would appear that many writers are highly critical of the traditional criminal justice system as a method of trying to effectively deal with B&E. If left, this may lead to a
proliferation in the use of private security by home owner collectives for almost vigilant patrol schemes (Sharp and Wilson, 2000). In summary, B&E is a very common crime in many jurisdictions, it has a very low clear-up rate and if an offender is caught and processed the deterrent effect is questionable (Sarre, 2001). Traditional reactive policing methods achieve poor outcomes in terms of B&E clearance rates. Over many years, this has led police and researchers to examine various proactive methods that may prevent B&E and how to measure police effectiveness in other ways besides clear-up rates (Collier, 1998; Dhiri and Brand, 1999). These pressures over time have led to the search for other possible solutions that look to prevention and proactive methods instead of traditional reactive methods (Tilley, 1995) and police are developing new methods to measure performance (Leigh, Mundy and Tuffin, 1999). The rising incidence of B&E and the poor clear-up rate mean that many victims will not find satisfaction. The next section discusses some of the different methods used by police and authorities to prevent B&E.

BREAK AND ENTER PREVENTION

The shortcomings of a traditional reactive police response are succinctly summarised by Geberth (1982a; 1982b), the Commanding Officer of Detectives in New York City, who concluded that “the truth is, the police can do little to stem break and enter” (p. 52). Kroese and Staring (1994) argued that one must seriously question whether the rate of B&Es would decrease in the Netherlands, even if the chances of being apprehended by police were to increase significantly. Blazey (1981) believed that the only advances possible in the area of B&E are in prevention and the public themselves are the most effective actors in this area, not the police. Many writers (Butler, 1998; Collier, 1998; Walsh, 1998) believe that policing is at a crossroads in its response to crime. The choice is between a traditional reactive response or a proactive community problem solving response. Police have realised that they need a more strategic approach to deal with residential burglary (Veale, Gabites and Thain, 2001). Police, after years of criticism, are starting to become more proactive in their approach to many crimes (May, Harocopos, Turnbull and Hough, 2000), especially B&E. Allat (1984b) found that when police helped residents install improved locks
on their doors, residents’ fear of crime decreased although the B&E rate remained static. However, Van Den Bogaard and Wiegman (1991) found that police do not reduce the psychological trauma suffered by B&E victims. Police intervention can sometimes increase the level of anxiety and fear (Miller, Bland and Quinton, 2000; Stone and Pettigrew, 2000).

Following is a discussion of some different methods tried by authorities. They are the use of undercover operatives, different evidence gathering techniques, cooperative partnerships, problem oriented policing, improved street lighting, analysing repeat calls for service, beat policing, neighbourhood watch, and even, compulsory hand gun ownership.

Police and the criminal justice system have experimented with various strategies in an effort to stem the rise in property crimes. Many of these newly developed strategies have been very controversial, such as compulsory DNA sampling of incarcerated persons (Migden, 2001; Rose, 2000; Tracy and Morgan, 2000), the use of polygraphs for questioning burglary suspects (Drdak, 2000) and zero tolerance policing (Darey, 1998; Poynting, 1999; Stenson, 2000). While some strategies have been less controversial and have been introduced without much debate, such as the installation of closed circuit television cameras in public places (Ditton, 2000; Painter and Tilley, 1999; Tilley, 1997) crime mapping (Rich, 2001; Weisburd and McEwan, 1997) and the electronic tagging of convicted offenders (Dunn, 1998; Payne and Gainey, 2000).

Murphy and Horton (1975) believe the fake fence approach is an effective police strategy. This is when police establish a phoney receiver of stolen goods. This is a popular strategy as receivers are still one of the most common methods for disposing of stolen goods (Stevenson and Forsythe, 1998; Stevenson, Forsythe and Weatherburn, 2001). Marx (1980) disagrees, arguing that when police pretend to be fences, they can secretly induce, facilitate and assist others to break the law by providing opportunities and encouragement. Police undercover sting operations constitute a more direct facilitation of deviance. If the police do not arrest every
person that comes to their notice during a sting they will have engendered crime somewhere. Another problem is that police may actually entrap or induce some people to offend when they may not have otherwise.

Many police prevention initiatives are motivated and guided by a crime prevention approach called problem oriented policing (Brown and Sutton, 1997; Leigh, Read and Tilley, 1998), which was first presented by Goldstein in 1979 (Goldstein, 1990). Problem oriented policing involves examining incidents that continually happen in clusters and trying to prevent further occurrences. The three main benefits of problem oriented policing are that the public are better served, police experience greater job satisfaction and these is a more efficient use of scarce resources because repeat calls for service are reduced (Welsh and Farrington, 1999). Leigh, Read, and Tilley (1996) outline the four main steps that assist police in trying to develop a structured and disciplined solution. The four steps are combined to create the acronym S.A.R.A. The first step is scanning. Police need to scan crime occurrences and identify clusters of crimes. The second step is analysis. This is when the cluster is examined in an effort to detect a common theme in the cluster such as the timing of the cluster of crimes or the place of incidence. The third step is response. This is the action developed to address the cluster. The response can vary from a minimal effort such as an increased patrol at a critical time or the response can involve the combined actions and inputs from numerous stakeholders in a large initiative. The final step is assessment. At the end of a strategy it should be assessed to evaluate how successful the effort has been. The use of problem oriented policing techniques can produce positive results (Mazerolle, Ready, Terrill and Waring, 2000).

The police have been involved in many B&E prevention initiatives in recent years. Many interventions based on improved street lighting have had mixed results (Atkins, Husain and Storey, 1991; Ditton and Nair, 1994; Painter, 1994). Tien, O'Donnell, Barnett and Mirchandini (1979) found that street lighting, in isolation, had no effect on the level of crime. Ramsay and Newton (1991) along with Atkins, Husain and Storey (1991) found that a prevention effort based on improved lighting could reduce crime, but it caused a concentration of serious crime in neighbouring
poorly lit areas, making them almost no-go zones. However, they did emphasise some caution Ramsay and Newton stated that “offenders are not necessarily much influenced by lighting conditions ... and better lighting by itself has very little effect on crime” (p. 24). Griswold (1984; 1992) found that a prevention initiative based on improved street lighting had excellent results. However, Griswold argued that street lighting alone will not deter crime but that it had to be part of a total crime prevention strategy. Sherman, Gottfredson, MacKenzie, Eck, Reuter and Bushway (1998) in a work that reviewed over 500 crime prevention initiatives found that since the Tien et al. study in 1979 “almost 20 years later, we know little more about the effectiveness of lighting” (p. 318). In very recent studies Painter and Farrington (2001) found that improved street lighting on an estate in England lowered offending on all but young victims. In two other assessments Painter and Farrington (1999a; 1999b) calculated that the cost of the improved street lighting was out weighed by the crime reduction savings. Pease (1999) also conducted a review of the effects of street lighting. He found that precisely targeted initiatives generally reduced crime, whereas the results for general increases in street lighting had mixed results.

Other police prevention initiatives have been instigated. Parrish (1983) conducted a study into a community policing initiative that included more beat police patrols and the recruitment of police from ethnic backgrounds. Parrish claimed a 26% reduction in burglaries, and a 30% reduction in bike theft. Total crime reduced by 3%, whereas crime in neighbouring counties rose 4% over the same period. More recently the Queensland Police and the Queensland Criminal Justice Commission were involved in initiatives based on beat policing. The beat policing pilot initiative took place in a large provincial city in Queensland called Toowoomba (CJC, 1995a). The initiative involved stationing an officer permanently in a beat area. The officer became intimate with the beat area and its problems and was responsible for reducing crime. Calls for service reduced from eight to five per 1,000 and calls for property offences reduced from eighteen to fourteen per 1,000. Significant increases occurred in resident satisfaction with police. The initiative worked so well (CJC, 1995b) that a beat policing officer was equipped (CJC, 1995c) and established in a metropolitan area in Brisbane (West End), and in an outer satellite suburban region of Brisbane.
(Ipswich). Beat policing, as a crime prevention initiative, has also resulted in positive results in the United States (Kane, 2000).

Other police prevention initiatives detail the use of strategic intelligence (Harman, 2001; Cherry, 2000; Coupe and Griffiths, 2000). Summers (1979) discussed the use of a sophisticated police modis operandi identification system for B&E. The system only operated once an offender was arrested after which the method of operation was stored. As new burglaries occurred, if method of entry was peculiar or the property stolen was unique, the peculiarities were used to list burglars who had used these methods in the past. The modis operandi system resulted in a 23% increase in stolen goods recovery and a 30% increase in arrests. Moore (1976) discussed a similar prevention program that achieved a 38% reduction in residential burglaries after one year.

Another example of a police prevention initiative is police partnerships with victims. Estes and Ewing (1975) outlined a project where police encouraged businesses to take responsibility for their possible future victimisation. When police were called to a location for a second time, the proprietors were told they had to comply with a crime prevention alarm ordinance, otherwise police would not respond to any future calls. Burglaries from business locations were reduced by 50% over a four year period.

Research has shown that victims of B&E are more likely to re-victimised compared to non-victims (Clarke, Perkins and Smith, 2001). Armed with this knowledge many B&E prevention initiatives target victims of B&E in an effort to reduce the re-victimisation. The pioneering repeat victimisation prevention project was the Kirkholt burglary prevention project (Forrester, Frenz, O’Connell and Pease, 1990). The researchers identified that a victimised address on the estate was four times more likely to be re-victimised. Using prevention initiatives based on upgrading security, property marking, removal of popular targets (gas meters), and cocoon watch after seven months there was an 80% reduction in repeat burglaries (Forrester, Chatterton, Pease and Brown, 1988). The key to the success of Kirkholt was that the initiative
was based in a high crime area, the responses employed were founded on careful
diagnosis and research and the prevention strategy was offence specific (Tilley,
1993). In Queensland, Australia the Queensland Police Service and the Queensland
Criminal Justice Commission have implemented and researched a repeat
victimisation scheme. The repeat victimisation scheme targeted homes and residents
who had been the victim of a B&E as victims are more likely to suffer a re-
victimisation than a non-victim suffer an initial victimisation (CJC, 2000). The
initiative achieved many positive results including a fifty percent reduction in repeat
calls for service (CJC, 1999a). A similarly successful repeat victimisation project
has also occurred in New South Wales (Taplin, Fletcher, McKenzie and Flaherty,
2001).

Over recent years repeat victimisation has become a flourishing crime prevention
research method (Anderson, Chenery and Pease, 1995; Bridgeman and Hobbs, 1997;
Chenery, Holt and Pease, 1997; CJC, 1997; 1999a; Farrell and Pease, 2001; Harman,
2000; Read and Oldfield, 1995; Pease, 1998; Townsley, Homel and Chaseling,
2000), which is important as repeat victims are less satisfied with the police response
(Van Dijk, 2000). Any prevention initiative based on repeat victimisation relies on
studies that can inform prevention program planners on the environmental cues that
could have the best influence.

Neighbourhood watch has become a common proactive police approach to B&E.
Perry (1984) and Kutzke (1977) investigated a neighbourhood watch B&E
prevention program. A pre and post comparison revealed that residential B&E was
reduced by 76%. The results were statistically significant. Le Blanc and Williams,
(1978) also investigated a neighbourhood watch program. For the three years before
the prevention program, burglaries had risen an average of 12% per year. One year
after the program burglaries fell 45%. Program evaluators could not find alternative
explanations for the reduction in B&E. Owens and Elliot (1974) found similar
results.
Neighbourhood watch tries to prevent crime by reducing opportunities. It also tries to create a sense of community with newsletters and local meetings (Rosenbaum, 1986; 1987; 1988). On a large scale, neighbourhood watch has had little success encouraging resident participation. Studies of resident participation in neighbourhood watch vary. In the United Kingdom a comprehensive study (Hope, 1988) found that fewer than 1% of the population was involved. Until recently rates varied from 7% to 18% in the United States (McPherson and Silloway, 1987; Rosenbaum, Lewis and Grant, 1985; Schneider, 1986; Whitaker, 1986). However, in a contemporary review the participation rate had further declined (Sherman, Gottfredson, MacKenzie, Eck, Reuter and Bushway, 1998). The low participation rate on a nationwide scale seems to handicap the effectiveness of neighbourhood watch.

Many studies (Bennett, 1984; Cirel, Evans, McGillis and Whitcomb, 1977; Fowler and Mangione, 1986; Greenberg, Rohe and Williams, 1985; Kohfeld, Salert and Schoenberg, 1981; Lindsay and McGillis, 1986; Pate, McPherson and Silloway, 1987; Rich, Chavis, Florin, Perkins and Wandersman, 1987; Titus, 1984) have found that neighbourhood watch programs reduce crime and the fear of crime. However, the methodology and measurements for all these studies are weak and all these studies have been criticised by others (Lurigio and Rosenbaum, 1986; Skogan, 1979; Yin, 1979). None of them can be defended in regards to internal and external validity. Another problem with all of these evaluations is that they are usually large scale collective assessments, which include physical changes to the environment, citizen action and patrols, changes in police practices, property marking and so forth. These evaluations do not isolate what each component contributes.

Neighbourhood watch and situational crime prevention have their critics (Fenwick, 1987; Findlay and Zvekic, 1988; Nee and Taylor, 1988; Skogan, 1988; 1990). The Campaign for Criminal Justice (CFCJ; 1988) believes that “an approach to crime prevention through neighbourhood watch, is not a satisfactory one” (p. 1). The Campaign for Criminal Justice believes that neighbourhood watch promotes locks and bars (target hardening) and a retreat from public life. Errey (1977) supports the
criticism that situational crime prevention through natural surveillance approaches found in neighbourhood watch does not strengthen the "natural sentiments of community and mutual aid (but it) catalyses suspicion" (p. 83). Studies have claimed that neighbourhood watch can increase a variety of social problems, especially fear of crime (Cirel, Evans, McGillis and Whitcomb, 1977; Lindsay and McGillis, 1986; Lurigio and Rosenbaum, 1986).

The Campaign for Criminal Justice argue that crime prevention should be linked to other policy areas such as unemployment and social welfare. This would help to bridge the gap between the two forms of crime prevention outlined by Bright (1994). The first is preventing crime, which is the situational crime prevention approach of Clarke (1992; 1997). The second approach tries to prevent criminality by implementing programs that might strengthen families (Kumpfer, Molgaard and Spoth, 1996), enhance education (Gottfredson, Fink, Skroban and Gottfredson, 1996; Gottfredson, Gottfredson and Skroban, 1996), revitalise communities or create training or employment (Hershey and Resenberg, 1996). Palermo, Smith, DiMotto and Christopher (1992) advocate that social crime prevention should be society's primary goal. Crime prevention could gain much wider acceptance and fend off critics if it tried to blend the two approaches. This has been the case in the Netherlands. In one example, both approaches are utilised successfully to reduce public transport vandalism, graffiti and fare evasion (Van Andel, 1989; 1992).

Incredibly, in the United States local mandatory firearm laws have even been utilised as a crime prevention initiative at a local level. McDowall, Wiersema and Loftin (1989) tried to discover the effect on B&E when a mandatory ordinance requiring all residents to own and carry a hand gun was enacted. Using a basic percentage difference analysis, burglaries fell by 53% between 1981 and 1982, and by 1985, the B&E rate was 20% of its 1981 value. Kleck (1986; 1988) also studied the effect of gun ownership on B&E and found an 86% decrease. Other studies (Green, 1987; Gurr, 1989; Kates, 1989; McGrath, 1989) unanimously supported the deterrent effect of mandatory gun ownership. However, when McDowall, Wiersema and Loftin (1989) conducted a rigorous analysis of the B&E figures over ten years (1976-1986)
their results led them to conclude that gun ordinance did not influence the frequency of B&E. Small changes from year to year produced impressive percentage differences that were not statistically significant over a sustained period.

The inability of the model based on traditional methods utilised by reactive policing has prompted some to declare that “this is a failed model” (Prenzler and Townsley, 1998). The criminal justice system is based on a reactive and deterrence - through punishment - strategy. Even as early as 1977 Saint Johnston (1977), Chief Inspector for Constabulary in England and Wales, stated that crime can not be substantially reduced by police action alone. The partnership approach between police and society is seen as a positive development (Loader and Walker, 2001). What is needed is a system of pro-active crime prevention based on sound theory and research. This thesis is an attempt to provide some of the information to establish a sound response to B&E. The traditional and reactive criminal justice system response is lacking and a solution based on prevention is required. Interestingly, the prevention of crime was one of the major purposes of the original new police (Neocleous, 2000). Over recent years the responsibility for the prevention of crime has expanded well beyond the sole jurisdiction of the police to include the public, all levels of government and private companies (Garland, 1996).

RESEARCH WITH A ROUTINE ACTIVITY FOCUS

In Chapter Two the rational choice perspective and routine activity theory were introduced and examined in detail. At the beginning of this chapter research on the prevalence of B&E has been presented and discussed. The next two sections present the findings of research on B&E that supports routine activity theory and the rational choice perspective. The perennial problems for researchers that have tried to assess the impact of a crime prevention initiative is whether any reduction in crime was due to the initiative (Ekblom and Pease, 1995; Pawson and Tilley, 1997) and whether it was cost effective (Ekblom, Law and Sutton, 1996a; 1996b) or ineffective (Price Waterhouse, 1997).
Work by ecological sociologists (Brantingham and Brantingham, 1984b; Clontz and Jeffrey, 1992) confirms the convergence aspect of routine activity theory. Brantingham and Brantingham (1981) argue that as "criminals search for targets, they are likely to be able to find an area which emits cues associated with a good target when the good crime area is close to the home base. Information flows should bias search behaviour toward previously known areas" (p. 31). Pettitway (1982) agrees with the Brantinghams, but he argues that burglars do have an overall bias towards areas where their anonymity is highest. Rengert (1988) argues that offenders typically commit crimes in familiar territory. Familiarity is gained using three methods: passively learning while completing daily activities; passively or actively gathering information on opportunities from secondary sources; or actively exploring new territory. Criminals cross paths with non-criminals while they work, travel to school, seek entertainment or take part in recreational activities. Thus they select targets while everyday activities are pursued.

Brantingham and Brantingham (1975a; 1975b) and Brantingham, Dyerson and Brantingham (1976) further supported the convergence aspect of routine activity theory in a study of the spatial patterning of B&E. The Brantinghams found that "blocks on border areas had higher burglary rates than blocks which were in the interior of neighbourhood sets" (p. 276). As a person walks through their neighbourhood, they can easily interact with an adjoining neighbourhood on its fringes. A fringe area of an adjoining neighbourhood is targeted the most. The Brantinghams argue that it may be possible to reduce the incidence of B&E by controlling the size and shape of neighbourhoods. Cohen, Kluegal and Land (1981), Evans (1989), Greenberg and Rohe (1984) and White (1990) confirm the findings of the Brantinghams.

Other studies also support routine activity theory. Hough (1987) used data from the 1982 and 1984 British Crime Survey to determine what factors contribute to a target's vulnerability. Hough tested the capable guardian element for B&E. As the number of hours a house is empty increases, the rate of B&E increases. Lynch (1987) supports routine activity theory, concluding that "routine activities affect the
risk of victimisation” (p. 294). Many researchers (Garofalo and Clarke, 1992; Molumby, 1976; O’Brien, Shichor and Decker, 1982; United States Department of Justice, 1977; Warr, 1988) have conducted studies into burglarised and non-burglarised dwellings and have found support for the guardianship element in routine activity theory.

In further support of the guardian element Maxfield (1987a; 1987b) found in an examination of the 1982 British Crime Survey that households with one adult (usually a female) and more than one child are at a greater risk of victimisation. This would seem to support routine activity theory. Whenever something has to be done away from the home that requires an adult, because there is only one present, the household is left vacant without a capable guardian. Sampson (1985) used data from the National Crime Survey to compare neighbourhood characteristics with rates of personal victimisation. Sampson found that neighbourhood factors such as density, mobility and family structure predict victimisation risk independent of individual characteristics such as age, race, sex, income and marital status. Sampson argued that structural density, family structure and mobility had the strongest effects on personal crime victimisation. This supports the convergence aspect of routine activity theory, as these factors all increase the chances of encounter between motivated offender and suitable target. Smith and Jarjoura (1988) found similar results to Maxfield.

Some studies examined wider demographic data to determine the risk factors or cues that increase the risk of B&E. Smith and Janjoura (1988) found that the percentage of the population aged 12-20 years, the percentage of single parent households and the density of a neighbourhood’s population are significantly associated with higher rates of B&E. Waller (1982) also found that residences that are occupied less often, such as by single or young people, are more at risk of B&E. Smith and Janjoura found the percentage of non-whites and the percentage of households occupied by persons who live alone are not significantly associated with acts of B&E. They also found that the percentage of households with incomes less than $5,000 had no association with B&E once other neighbourhood characteristics were taken into
account. A further analysis that included the number of single parent households in
the equation accounted for the significant association between poverty and B&E.
Mutsaers (1996) also found that persons who live alone were more at risk of B&E.
Smith and Jarjoura concluded that residential instability and social heterogeneity are
indicators of weak neighbourhood integration. These communities are characterised
by transient populations with segmented neighbourhoods with few elements that
socially unite citizens. Smith and Jarjoura argue that conditions that maximise an
individual’s anonymity in a community have a strong influence on crimes such as
B&E, because offenders believe there is less chance of detection. Kinkel (1980)
found that transient areas, those with high proportions of rental properties, were more
at risk of B&E. Further compounding the victimisation of renters is the work of
Block, Nold and Weller (1980) who found they are less likely to call the police to
report a B&E.

A study conducted by Bopp (1986) and supported by Sterrett and Kleberg (1999)
found more support for the guardian element of routine activity theory. Bopp
conducted a profile of B&E in the United States using official data. At the time of
the study, there were approximately 85 million households in the United States.
Every ten years 73 million burglaries occur. Entry was gained without force in 45% of
all B&Es. B&E was more prominent in summer (people on vacation/windows left
open) and winter recorded the lowest B&E figures (people at home). This confirms
the capable guardian element in routine activity theory. B&E primarily takes place
in the daytime. In a country supposedly worried about crime, entry in approximately
8,000 burglaries per day is through an unlocked door or window. Over a ten-year
period, on 30 million occasions, households gave easy access to burglars by not
locking their doors or windows.

A conflict in routine activity theory involves the connection between crime rates and
unemployment. Brenner (1978) argued that crime increases with an inability to
maintain an accustomed standard of living and Merton (1968; 1983) argued that
frustration between aspirations and reality led to increased crime. These writers
predict a positive relationship between economic deprivation (unemployment) and
crime. However, Cantor and Land (1985) argued that if people are unemployed they tend to stay in more often, or in the vicinity of their homes, which would naturally increase the capable guardian element (1985:32). Cantor and Land argued that high unemployment rates would also lower the total amount of goods that could be stolen from households. A continual increase in employment and economic growth would lead to an increase in crime because a healthy economy means a greater availability of stealable goods, and higher employment means more people are away from their homes due to work commitments and/or leisure activities (decreased guardianship). Gramling, Forsyth and Fewell (1988) and Cook and Zarkin (1985) agreed with Cantor and Land.

Neustrom, Jamieson, Manuel and Gramling (1988) compared Federal Bureau of Investigation data of the seven categories of index crime over 4½ years. The unemployment rate varied from 4% to 14%. No significant relationship was found between unemployment rates and homicide, robbery, B&E and motor vehicle theft. A significant relationship did occur with larceny and assault (explained by increased alcohol consumption due to unemployment leading to violence within the home). Other reviews (Freeman, 1983; Long and Witte, 1981) of the relationship between crime and the business cycle have shown little or no evidence of an interaction between unemployment and crime.

Different situational variables may have varying degrees of potency for timing, rhythm and tempo. It could be that each significant variable may have a weak or strong routine activity convergence influence. Cohen and Felson (1979) argue that the probability of a violation occurring is a function of the convergence of the three minimal elements. Drugs could exert an influence in terms of routine activity by increasing the risk taking behaviour of offenders. Therefore, crimes where drugs are prevalent may require the capable guardian to be more capable than for non-drug prevalent crimes. This area is under researched.

It is the contention of this thesis that the actual physical attributes of the home are the most effective capable guardians in terms of B&E. Whether residents are present or