relevance and effect. Younger and experienced burglars would not be as deterred by the extra effort involved in seeking a new location, so they are a problem for displacement, but not as great a problem as older experienced burglars.

**Figure 42: For younger burglars the theorised impact of increased experience on the probability of displacement.**

Figure 43 depicts the suggested probability of displacement for older burglars. For older and experienced burglars cues concerning reward have increased significance and effect. Older and experienced burglars are the most difficult to deter, especially when they receive cues that signify reward such as reliable inside information. In the figure the slope of the curve begins in a steep climb but then falls away as an increased physical effort does become a consideration for older offenders, which is consistent with a recent study by Fritzon (2001), who found a relationship between the age of an arsonist and distance travelled to commit a crime. This finding supports the hypothesised levelling off of the curve in Figure 43 for older offenders.

**Figure 43: For older burglars the theorised impact of increased experience on the probability of displacement.**
The key point in light of the findings in this thesis is related to the argument that if there is too much emphasis on place what an offender brings to a criminal event can be neglected (Ekblom, 2000; Ekblom and Tilley, 2000). This thesis shows that subjects interpret individual cues and combinations of cues differently depending on their age and experience. Subjects are also drawn to different cues depending on their age and experience. Certainly manipulating the attributes of a guardian or place to maximise prevention is good practice, but it is an offender who ultimately decides whether the guardian is too capable and the place too formidable. For example, manipulation of place attributes for a crime prevention initiative that have only have an influence on younger and inexperienced burglars would have negligible impact if the majority of B&Es in a targeted area are committed by older and experienced burglars.

Criminal career research is usually concerned with onset and desistence in an effort to isolate factors that reduce offending commencement rates and increase offending cessation rates. The duration phase is often neglected. The findings of this thesis show that age and experience influence the interpretation of cues. Farrington (1992) has stated that criminal careers offer little in terms of situational prevention. The findings of this thesis show that the duration phase is a source of information that is directly applicable to situational prevention. Prevention of crime can be enhanced through the continued examination of the onset phase, the desistance phase and the increase of age and experience in the duration phase.

Farrington (1995) proposes the integration of the offender and the situation in prevention thinking. He states that research is needed to see if “interactions exist between different types of offenders, types of situations and types of prevention strategies” (p. 351). A main finding of this thesis is that the attributes (age and experience) of an offender are so fundamental, intertwined and important that that they must be integrated into any prevention approach. Farrington argued that integration is overdue and would have many potential benefits in advancing knowledge about the causes and prevention of crime. He also states that “developmental researchers have been insufficiently concerned about when and
where crimes (and victims) occur, while situational researchers have been insufficiently concerned about long-term individual differences in criminal potential” (p. 334). The findings in this thesis show that age and experience have too much of a fundamental influence to be even partially ignored. Gilling (1997) argues that the intention of the rational choice perspective “has always been to build a bridge between the situation (crime) and disposition (criminality), thereby bringing together what criminological politics has done so much to keep apart” (p. 60). The findings of this thesis assist this bridge building process, and point to the need to examine the other dispositional attributes that can influence offender decision making.

The implications of the findings can be illustrated by considering routine activity theory. Eck (1994) described routine activity theory as two triplets. Three agents (guardian, handler and manager) influence the likelihood of the occurrence of a crime. A guardian protects a potential victim, the handler controls the likely offender and the manager supervises the place. The stronger these three agents are the less likely it is that a crime will occur. It is hypothesised that the graphical depiction of routine activity theory in Figure 3 (p. 35) could be redesigned in light of the findings in this thesis. Figure 44 shows the new design after an offender has broken free from their controlling influence (handler). For a crime to occur an offender has to decide if a place and guardian are conducive to the occurrence of a crime. Figure 44 depicts the redesign at this point. It shows that the offender is free from their intimate handler, but there is a possible formidable bond between guardian and victim and the manager and place. At this point the offender views the place and target through a compound (age and experience) lens. Through the lens an offender decides if the net deterrent effect of the guardian and manager is too formidable. As the findings of this thesis show a manager could have attempted to make the attributes of a place less conducive to a crime. These alterations may deter a young and inexperienced burglars, but not older and experienced burglars. The attributes of the offender cannot be removed from the equation as they are crucial to determining if an offender assesses the guardian as too capable and the place as formidable.
Figure 44: Redesign of the elements of routine activity theory.

Figure 44 reduces the influence of age and experience to a lesser role than it probably has. The situation depicted in the figure is only applicable when all four groupings – old/inexperienced, old/experienced, young/experienced and young/inexperienced – are viewing the same cue(s). The influence of age and experience is deeper and more profound than just the construction of a compound lens. Findings show that older and more experienced burglars are drawn to and place more emphasis on cues that signify reward, whereas young and inexperienced burglars are drawn to and place more emphasis on cues that signify risk. Age and experience have an effect on how a burglar interprets a cue, but these attributes also influence the cues chosen.

These findings on the influence of experience are consistent with the findings of decision making research on expertise in non-criminal contexts. Studies on expert versus novice decision making have found that experts utilise fewer cues (Camerer and Johnson, 1991), are more efficient (Ericsson and Smith, 1991) and utilise only relevant information (Gaeth and Shanteau, 1986). Experts are more efficient and use fewer cues to reach a decision because over time they build up expectations about
cues that typically covary (Einhorn, 1986). An expert will survey one cue and will then infer attributes of other cues, whereas a novice is more inclined to survey more cues to reach a decision.

The research in this thesis shows that both the experience point in the criminal career and the age point in the life course influence offender decision making. They also interact with each other to produce further variance in decision making. The depth of influence is probably more complex than just a cognitive compound lens. Crime and criminality interact at many levels and one cannot be emphasised without damaging one’s understanding of the influence of the other.

PRACTICAL IMPLICATIONS

Break and enter is at high levels in Australia and elsewhere (Van-Kesterten, Mayhew and Mieuwbeerta, 2000). Collective or global analysis will provide possible prevention opportunities at a broad level. However, it is only at street level that choices are made. Therefore it is at this level that prevention can be most productive when implemented. B&E is so common that to implement blanket prevention over whole districts, regions or states treats all criminals and crime as a generic mass and will produce mixed results (Laycock and Tilley, 1995a; 1995b). Prevention must operate on a street by street basis with pro-active initiatives based on research conducted on actual burglar decision making. As Hough and Tilley (1998b) state “once a general approach to a problem has been identified, it has to be tailored intelligently to suit the local setting. Routinely-used techniques often cannot be taken off the shelf and applied mechanically with much real prospect of success. Standard, broad-brush, blockbuster approaches to problems tend to produce disappointing results” (p. 28).

Perhaps the methodology and findings from this research can be used to inform a proposed situational crime prevention initiative, if the targeted crime includes a victim selection process. Before a situational prevention initiative is implemented the practitioner could conduct some interviews to determine the key cues. Then
several subjects could be put through a simulation exercise. This would acquaint the practitioner with the cues that have the greatest deterrent and attractive effect. The situational crime prevention response could then be based on manipulating these key cues to achieve the maximum impact and accomplish the goal of getting the grease to the squeak (Farrell and Pease, 1993; Hough and Tilley 1998b).

The methodology utilised in this thesis may help to explain why some situational crime prevention efforts have been successful, while others have not. Earlier it was explained that older and experienced subjects selected and placed more weight on cues concerning reward, whereas younger and inexperienced subjects were more concerned with cues associated with risk. If a situational crime prevention initiative were implemented in a small town and the prevention measures enacted related to increasing risk this would have a greater effect on younger and inexperienced subjects. If older and experienced subjects were committing most of the break and enters in this small town the break and enter rate may not change greatly.

As mentioned previously, the results from Study One and the literature on drugs and crime revealed that when subjects were in desperate need of heroin they would take greater risks for less gain in comparison to when they were not in need of heroin. Subjects also stated that it was usually when breaking and entering under these conditions when they were discovered and arrested by police. The clear-up rate is very low for break and enter so this raises the possibility that police may be arresting a particular type of burglar: one who when in desperate need of heroin makes poor decisions. This could lead police to form a biased belief concerning the usual level of sophistication of the break and enter decision making of heroin users. The 70% to 80% of break and enters that are unsolved could indicate that there are many burglars exercising very good judgement. The practical consideration is that any prevention initiative based on police encounters with arrested burglars may be flawed as it could be based on a biased sample. Ham-Rowbottom, Gifford and Shaw (1999) compared the burglary target selection methods of residents, police and burglars. They concluded there was such a difference that prevention should be based on the selection methods of burglars.
The results showed the intricate nature of burglar decision making. Different cue combinations and alternatives and the interaction of age and experience all combined to influence final ratings. If the results provide one clear result it is that global statements on the effect of cues should be interpreted carefully. The robust results from this thesis are that four cues – cue 1 (dog), cue 3 (alarm), cue 13 (people in the street) and cue 16 (inside information) – accounted for 91.77% of all first selections. Six cues – cue 1 (dog), 3 (alarm), cue 4 (occupancy - lights/tv/radio), cue 5 (occupancy - car in driveway), cue 13 (people in the street) and cue 16 (inside information) – accounted for 67.8% of all selections made. Clearly these six cues are very important to offenders and they should be the focus of any prevention initiative. The two most effective prevention measures are the deterrent alternatives for cue 3 (alarm) and cue 4 (occupancy - lights/tv/radio).

Of note is the overall ineffectual impact of good locks, the flora surrounding a house and neighbourhood watch. As mentioned previously (p. 82) there are many studies that have found that locks are ineffectual as a deterrent. This study confirms that the condition and type of locks on a property do not have much influence on the decision of a burglar on whether to break in. Previous research has found that the flora surrounding a house is of no importance (Nee and Taylor, 1988) in target selection. This study confirms the finding of Nee and Taylor. Although flora surrounding a house was mentioned in the first study conducted for this thesis it was of little importance in explaining the target selection findings in Study Two. Neighbourhood watch had little influence on the selection of a target. It could be that neighbourhood watch is beginning to become ineffectual because it has been around for some time. One caveat must cover the results of this research and it is the same caveat that covers most situational crime prevention studies. It is that the results obtained are not fixed, and that over time the same study may produce different results. There is also a proviso that as new environmental measures become dated their effect will erode as the impact related to newness recedes and counter measures develop. The deteriorating effect of environmental cues is encapsulated by the question, “Would the effect of an alarm diminish if every house had one?” At this point in time a very good alarm is still relatively uncommon so it had a considerable impact on the
deliberations of the subjects in Study Two. However, as alarms become more common and methods of countering them become more widespread their impact will probably recede. It could be that neighbourhood watch is becoming staid due to prevalence and needs to be re-marketed to refresh its impact on burglar decision making.

The two most attractive alternatives were for cue 12 (location; house is located on a corner block) and cue 16 (inside information; from a reliable source you are told there could be a large amount of cash kept in the house). The qualification to these global statements is that the effect can interact with the age and experience of an individual burglar and be influenced by the alternatives present for other cues.

In light of the considerable work now being done in the area of repeat victimisation (Farrell and Pease, 2001) it is clear that victims of B&E are more likely to be re-victimised (Van Dijk, 2001). The present thesis could provide a prevention guide for victims and potential victims. A potential victim could review the list of seventeen cues, especially the significant deterrent cues, and then introduce any that are not present in an effort to minimise the risk of future victimisation. This empowerment of victims to reduce their own future risk is a highly regarded prevention mechanism (Everson and Pease, 2001; Kleemans, 2001; Taplin, Fletcher, McKenzie and Flaherty, 2001).

The association between cue 16 (inside information) and older and experienced burglars in the research analysis raises another possible connection with repeat victimisation. Burglars can gain inside information through various sources, such as acquaintances that have occupations that allow them to go inside people’s homes, like removalists or delivery persons. However, one of the best sources of inside information for a burglar would be from a previous burglary. A burglar may burgle a property and then may decide to return later because they now have inside knowledge of a target. The alternative for cue 16 (inside information) in Study Two stated “from a reliable source you are told there could be a large amount of cash inside the house”. There is no more a reliable source than a burglar’s familiarity with
a property. Older and experienced burglars place a lot of importance on having reliable inside information and this may have a connection to repeat victimisation. More research into this connection is needed.

**DIRECTIONS FOR FUTURE RESEARCH**

Future research could include building a predictive model that could test the vulnerability level of any house in terms of B&E. The model could operate by entering the respective alternative for each of the 17 cues used in this research, thereby giving any house a vulnerability rating. If such a model were developed further research could pit the model against a group of burglars to gauge its accuracy.

It would be possible in future research to incorporate additional variables that were held constant for this study. This would allow a more comprehensive investigation and analysis of target selection decision making. The following cue alternatives could be added:

- time of offence, (day or night);
- working alone or with others;
- target variation, (a house, flat or commercial premises);
- greater variation in residential architecture types such as brick, weatherboard, modern or period, single or double story etc;
- whether breaking in while the residents are home is a possibility; and
- the inclusion of all possible cues and not a list of the 17 most important cues.

It would also be of benefit, although difficult to achieve, to have two distinct samples. The first would be in desperate need of heroin and the second would have recently ingested heroin. This would provide a comparison of how burglar decision making varies in relation to the recency of heroin use. The practical difficulties involved in such a study are obvious.
Another improvement in the methodology would be the incorporation of more visual effects and interactive possibilities in a computer simulation program. The use of these improvements, which are inevitable with computer development, would allow the use of more variation in cue alternatives. For example, with cue 1 (dog), there could be different breeds and characters of dog used. This could permit one to tease out various different interactions that involve the presence of a dog. One could, for example, present the features of a house in a pictorial fashion using the latest computer software technology. Subjects could point and click the cursor at various features to get more information.

The method and variables in Study Two could be greatly developed to test for displacement predictors. Variables would need to be added to the design to allow subjects to move to other crime types or crime sites. This would test for straightforward, benign or malign displacement. If subjects wished to continue with a B&E one could assess if various factors would make them cease. Case studies could in principle be grouped into clusters (neighbourhoods) and one could examine subjects’ willingness to continue committing B&E in a particular neighbourhood. An even more sophisticated design is required to further understand the factors that inhibit displacement. The findings from Study Two suggest that it may be possible to design a study to test whether younger and inexperienced burglars are more readily influenced by factors that inhibit displacement than older and experienced burglars.

One of the key outcomes of work undertaken for this study, besides the burglar decision making research and the results, was the method that was used. A similar method could be used for many other types of offences where a target is selected, such as armed robbery or stranger rape. First a researcher could conduct a literature review to become knowledgable about the crime and to compile a list of all the possible cues that are relevant in choosing a target for an armed hold up or a stranger rape. The researcher could then interview a number of armed robbers or stranger rapists and ask them what would attract them to a target, or deter them from a target. A list of key cues could then be created with possible alternatives for each and a computer case study simulation program could be created. The results would show
which key cues have the greatest deterrent and attractive impact, which might have considerable potential in terms of prevention initiatives.

In summary, this thesis had an overarching goal of measuring and analysing burglar decision making at a level of intricacy that would establish a new benchmark for the study of all offender decision making. That goal has been achieved. The method and analyses have provided an unprecedented precision of focus. Evidence has now been provided that establishes the utility of the rational choice perspective as a method for analysing burglar decision making even when the offenders are drug dependent.