Trends & issues



in crime and criminal justice

No. 479 September 2014

Foreword | Armed robbery is a diverse, heterogeneous crime shaped by the presence or absence of a wide array of characteristics. Therefore, effectively preventing armed robbery requires a good understanding of the nature of the offence. Previous attempts to understand armed robbery have focused on the offender, primarily by interviewing incarcerated offenders to gain insight into their motivations and planning. However, this approach overlooks the unique vulnerabilities associated with the victim and/or the location of the offence.

In this paper, four armed robbery profiles have been constructed, based on information contained in qualitative police narratives supplied as part of the AIC's National Armed Robbery Monitoring Program. These profiles highlight the way in which the location, environment and offender interact to shape individual incidents of armed robbery in Australia and may assist to inform prevention strategies.

Adam Tomison
Director

Where and when: A profile of armed robbery by location

Georgina Fuller

In 2010, approximately 5,000 individuals and organisations reported being the victim of armed robbery (Borzycki & Fuller 2014). After assault and sexual assault, armed robbery is the third most common violent crime reported; a trend that has remained consistent over the last 10 years (AIC 2013). However, armed robbery is unique when compared with other types of violence due to its overlap with property crime. Specifically, while armed robbery involves the use or threat of force or violence, the primary purpose is to deprive the individual or organisation of their property (Pink 2011). A such, an incident of armed robbery can have both immediate and long-term psychological and economic ramifications for the victim. Therefore, the prevention of armed robbery remains a key focus of business groups, as well as law enforcement agencies.

In order to develop effective crime prevention strategies, it is necessary to acknowledge the heterogeneous nature of armed robbery. Incidents of armed robbery can vary depending on whether the victim was a person or an organisation, whether the offender was armed with a knife, firearm or other weapon, or whether the offence occurred on the street or in a commercial premise (Borzycki & Fuller 2014; Mouzos & Borzycki 2003). Therefore, understanding the qualitative differences between incidents is vital in order to avoid implementing ineffective and generic approaches to armed robbery prevention.

Previous profiles of armed robbery have almost exclusively focused on the offender. Research conducted in Australia and overseas has examined the characteristics and motivations of offenders in order to explain the variations in robbery (see Gabor et al. 1987; Matthews 2002; Mouzos & Borzycki 2003; Nugent et al. 1989; Walsh 1986). However, while such an approach has merits as an investigative tool, it is limited in its presentation of armed robbery more generally. Specifically, these profiles fail to appropriately capture the influence of the environment and the victim on the offender. It would therefore be useful, when looking to prospectively prevent crime, to broaden this focus and incorporate not just the offender but also vulnerabilities associated with particular victims and/or locations.

The aim of the current research is to develop overarching profiles of armed robberies based on the locations in which they occur. The four profiles reflect the ways locations and their environments interact with the offender to shape the nature of the armed robbery incident. The purpose is to provide a better understanding of the unique vulnerabilities associated with each category that may then assist practitioners implementing crime prevention across the different locations.

Profiling armed robbery

The decision to profile incidents by location has its foundations in a routine activity theory (RAT) of crime (Cohen & Felson 1979). At its core, RAT proposes that crime occurs when three elements converge at the same time and in the same geographical location the presence of a motivated offender and a suitable target, as well as the absence of a capable guardian. RAT underscores many crime prevention initiatives, where the primary aim is to manipulate one or more of these elements, therefore rendering an offence less likely to occur.

Until now, armed robbery classifications have focused almost exclusively on characterising different offenders and their motivations. Early work by Gabor et al. (1987) identified four types of Canadian robbers—chronic, professional, intensive and occasional offenders. The groups were distinguished predominately by the frequency of their offending. Chronic and professional offenders had longer careers and committed a high volume of robberies (more than 20 over the course of the career). However, these two groups could be differentiated from each other by their level of planning and the level of diversification into other crimes. Specifically, professionals planned more and were less likely to diversify. By contrast, intensive and occasional offenders committed smaller numbers of robberies and were characterised by a lack of planning, shorter criminal careers and higher rates of desistance. Intensive offenders particularly tended to commit the majority of their robberies in a short period of time; sometimes within a few weeks (Gabor et al. 1987).

More recent classifications have differentiated offenders by their level of planning and professionalism. For example, in the United Kingdom, Alison et al. (2000) used underworld terminology to distinguish between three types of offenders—robin's men, bandits and cowboys. Robin's men were the more professional offenders, while bandits engaged in planning but were more likely to resort to violence when the robbery moved beyond their control. Cowboys committed armed robberies to fund existing drug habits or while under the influence of drugs (Alison et al. 2000). Matthews (2002) constructed an alternative classification after interviewing 340 convicted robbers. He provided these insights into their offending behaviour:

- · Amateurs tended to engage in unplanned and disorganised armed robberies. These offenders were characterised by a lack of experience as well as a history of attempted but not completed robberies. Compared with the other two categories, amateurs commonly had issues with or directly used illicit drugs during their offending.
- Intermediates engaged in more planning than amateurs, while also tending to have more experience. Matthews identified a further two subcategories diversifiers and developers. Diversifiers were not exclusively involved with armed robbery and were also likely to commit burglary or motor vehicle theft and drug dealing. Alternatively, developers were characterised as offenders transitioning into professional armed robbery.
- Professional and persistent offenders were career robbers for whom crime was a part of their everyday life. These individuals engaged with greater levels of planning, more carefully selected their targets and used 'serious' weapons such as firearms. Due to the fact that robbery was used to support their lifestyle, professional robbers were more likely than other types of robbers to focus on high-yield targets (Matthews 2002).

Profiles and classifications of armed robbery that focus exclusively on offenders have particular use for police and other investigative agencies. For instance, profiles can be useful when there is a lack of eye witness or forensic evidence or a suspected offender (Hahn-Fox & Farrington 2012). However, focusing on the offender targets only one of the three elements specified by RAT. It is important to include the other two in order to implement more holistic approach to crime prevention. Further, shaping crime prevention initiatives around specific offenders is not always the most practical approach for armed robbery. For example, increasing the security within a post office (eg fly-up screens) may de-motivate an amateur or intermediate offender. However, the high cash flow will still make the location attractive to professional robbers who have experience circumventing these types of security measures. Similarly, it would be impractical for a grocery store to employ the same level of security as a bank, as it would impede the ability of the store to do business. It is therefore better to understand the unique characteristics of robberies as they occur in each location, as well as how they affect the offender. This would allow a greater tailoring of crime prevention strategies to the individual location or business and help create a more proactive approach to preventing armed robbery that embraces all aspects of RAT.

Method

The Australian Institute of Criminology's (AIC) National Armed Robbery Monitoring Program (NARMP) was established in 2001 to examine trends and changes in armed robbery in Australia. NARMP receives quantitative state and territory police administrative data describing reported armed robbery victims, offenders and incidents. Although armed robbery can have negative consequences for anyone involved, for recording purposes, NARMP defines a victim as only the individual or organisation whose property was targeted. For example, an organisation will be listed as the only victim if only money from the till is stolen, despite an employee being 'held up'.

Since 2004, in addition to the quantitative data, some police jurisdictions have supplied a sample of police reports pertaining to armed robbery. These jurisdictions include New South Wales, Queensland, South

Australia, Western Australia, Tasmania and the Australian Capital Territory. Not all jurisdictions supplied qualitative data consistently between 2004 and 2010, and the method of sampling used by police to select the cases is not known; however, the narratives that were supplied capture detailed qualitative information not contained in the quantitative data. This included victim and offender interaction, offender strategies and the sequence of events. This information has allowed researchers a unique opportunity to gain a greater understanding of the complex nature of armed robbery as it varies across location.

Initially, the full sample of 627 narratives held by the AIC as part of NARMP was coded using Microsoft Excel in order to identify broad patterns and trends.

The recording of qualitative information varied considerably both within and between jurisdictions. Some narratives provided a very detailed account of the robbery, while others were no more than a paragraph in length. This variation between narratives has limited the ability to make definitive statements regarding the trends and patterns. As a result, it is important to acknowledge that the absence of information did not necessarily mean it was not present in the incident; rather, it may not have been reported. Ultimately, locations were compared across the following 10 variables:

- type of victim—individual (person), organisational or mixed;
- number of offenders—single, pair, three or more;
- type of group (if more than 1 offender) professional or amateur;
- time of day—day (6 am-5:59 pm) or night (6 pm-5:59 am);
- offenders age—25 years and younger, older than 25 years, mixed age;
- alcohol and other drugs (AOD)—victim/ offender under the influence, AOD stolen, syringe used, no involvement;
- relationship victim/offender—unknown, recognised (no prior relationship), prior relationship (acquaintance/colleague), prior relationship (family/friend);

- motivation—cash focused, not cash focused:
- weapon—knife, firearm, bar/bat/blunt, opportunistic, syringe, mixed weapons, other; and
- weapon use—harm, threaten, neither, property damage.

Where applicable, the results of the Excel coding were compared with similar variables in the larger, quantitative NARMP dataset. Specifically, the patterns across locations were compared in both datasets in order to determine the representativeness of the qualitative sample. Importantly, there was a high degree of correspondence between the two samples across the majority of locations. The only location where there was divergence was post offices.

Based on the patterns identified through the initial coding scheme, locations were classified into four groups (see Table 1). Locations were grouped according to similarly in the patterns observed across the 10 variables.

Table 1 Locations of armed robbery and corresponding classifications^a

corresponding classifications				
Classification	Location			
Private space	Residential			
Public space	Street/footpath			
	Public transport (including taxis)			
	Private vehicles ^a			
Insecure business	Retail			
	Service stations			
	Newsagents			
	Takeaway stores			
	Grocery stores			
	Liquor stores			
	Private business/office			
	Chemists			
Secure business	Licensed premises (including hotels, pubs, nightclubs)			
	Post offices			
	Banking/financial institutions (including places of gambling)			

a: Despite being privately owned, private vehicles showed a high level of congruency with other public locations. This was due to the location of the car during the robbery. Commonly, cars were parked in public car parks or on the side of the road

The 627 narratives were then further coded using qualitative analytical software NVIVO 10. After assignment to one of the

four classifications, the narratives were coded line by line to highlight a number of broad themes including context (victim movements), initiation, offender exit, violence, threats and security presence. The primary aim of the thematic coding was to explore the nature of armed robbery in order to build a more comprehensive profile of each of the four categories.

Inferring characteristics, such as the level of planning or motivation, was difficult due to the absence of the offender's perspective. As a result, across all four profiles, characteristics such as these were determined through the presence or absence of context-specific indicators. These indicators are discussed in each of the profiles below.

Results

Armed robberies against individuals

Private spaces

Armed robberies that occurred in residences were classified private because access to the location was severely restricted to members of the public. In total, 77 (12%) of narratives included in the final sample described an armed robbery in a private location.

The most common method by which offenders gained entry was through invitation from the victim. Offenders were often onsite prior to the robbery occurring (visiting) or knocked on the door and were admitted. For example:

[Victim] let [offender] in the house, when [offender] was in the hallway [offender] produced a pocket knife and said 'Give me my fucking money' and 'If you don't give me the money I'll slit [witness'] throat' (N199)

A minority of offenders gained entry through the use of deception.

A key distinguishing feature of robberies in private spaces was the involvement of offenders who were known to the victim, with the offender-victim relationship commonly described as an acquaintance or friend. Robberies by family members were rare. The fact that offenders were quite often known to the victims may also explain

their relative ease in gaining access to the locations (ie from knocking on the door). Offenders who were known to the victim often targeted specific property or amounts of cash. Conversely, the robberies also occurred in the context of a dispute over ownership or money as demonstrated in the following example:

Offender was brandishing an iron bar of some description and assaulted the victim with the bar...Offender snatched the victim's handbag and car keys... telling the victim then when [they] returned [the offender's] property [they] could have [their] vehicle back (N207)

Disguises were sometimes used by offenders to mask their identity. However, the disguises were rudimentary—t-shirts or bandanas tied around the lower face were common.

The most common weapon used by offenders during armed robberies in private spaces was a knife (n=17; 22%). This finding is in line with broader patterns in armed robbery across the majority of locations. However, unlike armed robbery more generally, a high proportion of robberies in private spaces involved violence. Specifically, 55 percent of the narratives (n=42) made reference to violence. Further, in 45 percent of the incidents (n=35), the victim sustained injury (14% sustaining serious or life threatening injuries). Weapon-based violence was common; however, it is interesting to note the way in which the weapons were used. While blunt weapons such as bars or bats were used to beat victims, stabbing or shootings were rare. Rather, when the offender was armed with a knife or firearm they used physical violence (punching, kicking) instead of the weapon to assault the victim.

Overall, the involvement of AOD was limited, being mentioned in less than 26 percent of narratives. However, where it was reported, commonly it was because the victim and/ or the offender were flagged as current or known users of illicit drugs. While offenders committing robberies in private spaces primarily targeted cash or specific items they knew to be on the premises, a common theme in cases involving AOD was the specific targeting of illicit drugs believed to be on the premises; for example, cannabis

or morphine. In these instances, offenders committed the robbery with the specific aim of stealing the victim's illicit drugs.

Public spaces

Since the inception of NARMP, public spaces such as the street/footpath, car parks, transport locations and open spaces have remained the most common locations for armed robbery (Borzycki & Fuller 2014). A total of 262 (41%) narratives included in the final sample described a robbery in a public location. Public spaces were characterised by having little or no restrictions on public access. This is an important distinction as it relates back to the notions of capable guardianship and target suitability proposed by RAT.

The most common incident of this type of robbery involved either one or two male offenders, armed with a knife, targeting a single, male victim. Although not as common as lone offenders, gangs of offenders were more frequent in public spaces than in any other location. Analysis of the narratives suggests that when gangs of offenders were involved, as well as using knives, weapons were also sourced from the immediate environment. Referred to as 'opportunistic' weapons, these weapons include items such as branches, rocks and broken glass.

In public spaces, planning was determined by the type of weapon use, the method of initiation and whether the offender actively attempted to avoid identification.

The majority of robberies committed in public places were characterised by a lack of planning and were therefore seemingly opportunistic in nature. Offenders most often used knives during armed robberies in public spaces; however, the second most common type of weapon was opportunistic. The use of these weapons is indicative of a low level of pre-planning because of their immediacy to the offender at the time of the offence.

The lack of strategies employed by offenders to avoid identification is also an indicator of the lack of planning that is characteristic of public armed robberies. In most instances, offenders did not attempt to hide their identity. For example, items

of clothing commonly worn during public armed robberies included beanies and long sleeves; gloves, balaclavas and other face coverings were rarer.

The opportunistic nature of these types of robberies was further illustrated in the following narrative:

As the victim reached the intersection, [the offender] has run up and hit [the victim] in the back of the head with a rock and knocked [the victim] to the ground. The victim was fighting off the offender who was trying to pull [the victim's] handbag away. [A witness] ran up and yelled 'What the fuck are you doing?' The offender disengaged and ran back along the street [they] had just walked down (N479).

The haphazard way the offender initiated and struggled with the victim is characteristic of a lack of planning. Offenders who preplan their robberies are better able to control the victim, which in turn enables them to take the targeted property more efficiently. The offender in the previous narrative not only failed to control the victim but also did not take proactive steps (such as choosing a quieter time to commit the robbery) to avoid witness intervention.

Offenders targeted whatever property victims had or were likely to have on them at the time, with no specific aim. In over 97 percent of all robberies in public spaces, offenders targeted cash. The next most common items targeted were electrical items such as mobile phones or personal music players; often stolen in tandem with cash or wallets. This meant that the takings were small as victims rarely carried large amounts of cash on their person.

Further, victims were targeted while in transit; for example, walking home or getting off a bus/train. AOD involvement was rare; being specifically mentioned in only seven percent of narratives (n=18). When it was noted, it was common for the victim to be under the influence of alcohol and on their way home from wherever they had been drinking. Unlike armed robberies in private spaces, there was no evidence to suggest offenders were targeting specific people.

Rather, the information suggests that these were 'suitable' victims; that is, an individual who is seen as an easy target because of their behaviour or other characteristics (ie age and gender; Johnson 2005).

Violence was still high compared with armed robberies that occurred in secure or insecure businesses, although not as high as in private locations. Of the 262 narratives, 41 percent involved some form of violence. However, where violence was involved and injury sustained, the majority of victims only received minor injuries that did not require medical attention.

Armed robberies against businesses

Public perceptions often portray armed robbery as a crime primarily perpetrated against a business. Armed robberies against businesses better fit this profile of a 'stereotypical' armed robbery than those that occur in either public or private locations. However, analysis of the police narratives emphasised that the profiles of robbery varies between different types of businesses. Importantly, a key distinguishing feature is the actual or perceived level of security the business has employed. For example, the level of security employed by a bank or other financial institution can reasonably be expected to be more complex than that of a takeaway or grocery store. While small businesses such as these employ alarms, CCTV cameras and safes in order to prevent and minimise victimisation, when compared with banks or other high security locations, these premises have the appearance of being more insecure; a perception that may make them vulnerable to armed robbery victimisation.

Insecure businesses

In total, 238 (37%) narratives described a robbery at an insecure business. Groups of offenders rarely targeted insecure businesses. As with robberies in public places, the most common type of offenders were either single or pairs of males armed with knives. In almost all of the narratives describing armed robberies of insecure businesses, the offender approached the cashier or employee directly and made

verbal demands for money. Further, in the majority of instances (n=212; 80%), the threatened person complied, handed over the money and the offender exited the premises on foot.

Violence during armed robberies of insecure businesses was rare. Less than three percent (n=7) of the narratives analysed involved violence towards employees of the store. This is likely to be due to the high level of compliance by business staff. Despite the absence of actual violence in most cases. offenders robbing insecure businesses frequently used threats of force or violence to ensure employee cooperation. In particular, threats to kill, maim or otherwise harm the employee were common. Examples of such threats include:

[H]and me your money or I'll stab you in the face...hand it over now or your mum won't recognise you (N169).

If you call the police I am going to come after you and I will hunt you down (N540).

Further, these armed robberies involved high levels of aggression, although the threats were not always as direct as those mentioned above. Equally common were offenders who made no statements of harm against the employee or reference to the weapon at all. For example:

[The offender] has then produced a silver coloured handgun, possibly a 9mm, from underneath [their] jacket and told the victim to get the money slowly, while holding the firearm in [their] right hand (N122).

Yet these implied threats were often just as effective at controlling as a direct threat. Many of the narratives included information that indicated that employees felt the same level of fear from an implied threat compared with a direct threat. In fact, victim compliance was just as high regardless of whether the threat was direct or implied.

In 64 percent of the narratives analysed (n=168), businesses were victimised between 6 am and 11:59 pm. Given the diverse range of businesses included in this category, the wide victimisation timeframe is to be expected. Insecure

businesses were most commonly robbed during or near the end of business hours. For instance, newsagents are open early in the morning, while some takeaway and grocery stores may be part of the late-night economy. The majority of these robberies took place when there were very few people in the store or around closing time, when the absence of quardians such as customers is more pronounced. In addition. the choice to rob a location at close of business may correspond with the time of day when cash was most accessible: for example, tills being counted or money being transported to the bank.

There is, however, some indication that compared with robberies of secure businesses, those committed against insecure businesses are less planned. For example, offenders who committed robberies against insecure businesses did not always make serious attempts to disguise themselves. While hoods and caps were common, the majority of offenders did not use any type of disquise. choosing to leave their faces uncovered. Further, the use of gloves (an important tool to avoid identification through fingerprinting) was rare.

However, some offenders did engage in a number of strategies to avoid identification. Chief among these was avoiding directly touching any property within the store. For example, many offenders had the employee or cashier place the money in the bag to avoid contact with the counter or till. Some offenders even made cursory attempts to 'wipe down' the scene after they left. The other common strategy was to try and avoid facing CCTV cameras.

Secure businesses

Banks and financial institutions, licensed premises (including pubs and hotels), gaming rooms and post offices are among the locations considered to be secure because of the perceived level and complexity of the visible and assumed security measures they employ. These locations are often characterised by the utilisation of strong environmental crime prevention, onsite security and strict cash

Table 2 Summary of location profiles						
Dimensions	Private	Public spaces				
		Open public spaces				
Prior relationship	Χ					
Targeted victim	Χ		Χ	Χ		
Violence	Χ	Χ				
Injury	Χ					
Weapon—firearm				Χ		
Weapon—knife	Χ	Χ	Χ			
Planning	Χ			Χ		
Opportunistic theft		Χ	Χ			
AOD	Χ					

handling procedures. High cash flow and large onsite cash holdings necessitate these measures. In total, 50 narratives (8% of the total sample) described an armed robbery in a secure business.

Potentially due to the complexity of security measures, single offenders rarely targeted secure businesses, while pairs or groups of three or more offenders/accomplices were common and mentioned in approximately 70 percent (n=35) of narratives describing an armed robbery at a secure business. Groups of offenders often worked collaboratively, taking on different roles. For example, working in pairs, one offender may be placed in charge of controlling witnesses and employees, while the other removes the cash or property. The combination of one offender and a lookout was also common:

[Offender 1], in possession of a firearm, approached the cashier booth located at the bar and demanded money be placed into a black bag [they were] holding...[Offender 2], waited near the door at which they entered (N361).

Firearms were the most common weapon present during armed robberies of secure businesses, ranging from pistols and handguns to sawn-off shotguns. This runs contrary to the other types of robbery where knives were the most common weapon used by offenders. In nearly all narratives describing a robbery of a secure business, the offender was armed. The most common scenario was for all offenders to be armed with firearms. Less commonly,

one offender was armed with a firearm and one armed with a knife.

Despite the seriousness of the weapons present, injury and violence was rare. Of particular importance, none of the 50 narratives describing an armed robbery involved an employee, victim or witness being shot. In only one incident was the firearm discharged and it was aimed at the ceiling, indicating the intent was not necessarily to harm. When violence did occur, witnesses or employees were physically assaulted—either punched or knocked down. However, severe violence, where employees were seriously beaten, was not present in any of the narratives analysed.

Offenders exclusively targeted large amounts of cash. Of the 50 narratives, the largest amount stolen was around \$50,000. However, the median amount stolen by offenders who targeted secure businesses was between \$1,000 and \$6,000. This money was rarely sourced from just one place within the business and many offenders demanded money from the tills as well as various safes.

The knowledge of the business' security procedures suggests that offenders engaged in planning, including prior surveillance. For example, in a robbery where the offenders stole \$50,000, the cash was stolen in less than four minutes. The offenders successfully navigated the presence of a security guard and staff, security barriers and multiple safes. This would have required substantial planning in order to accomplish

this within the timeframe. Other indicators of planning include the presence of a firearm and the use of disguises.

Discussion

The characteristics of the four profiles are summarised in Table 2. Importantly, the results support findings from previous exclusively offender-focused profiles. For example, robberies that occurred in secure businesses were most commonly perpetrated by groups of offenders armed with firearms whose knowledge of the layout and security indicate a high level of preplanning. This corresponds with Matthews (2002) professional armed robbers, while his amateur and intermediate robbers are likely to be found across the locations. The disorganised nature of robberies in public spaces may particularly indicate the amateurish nature of these incidents.

Further, the profiles presented in this paper highlight the importance of broadening the focus to include an understanding of the vulnerabilities associated with location and victim. This is approach is supported by RAT, which states that crime occurs when there is a suitable target, a lack of capable guardianship and a motivated offender.

Specifically, while exclusively offenderfocused profiles provide valuable insight into the planning and motivation behind armed robbery, the profiles presented in this paper go further and illustrate how these factors interact with the location. For example, these profiles show how a pre-existing relationship between an offender and victim may facilitate a robbery in a private space or how victims are most vulnerable to armed robbery in public spaces when they are in transit. These findings support the notion that preventative approaches should account for differences, depending on the characteristics of the locations in which armed robberies occur. Doing so will ensure that practitioners avoid implementing an all-encompassing, 'one size fits all' solution.

The purpose of this paper is to highlight how armed robbery varies depending on the location in which it occurs. It is not intended to proscribe crime prevention solutions; however, the profiles do provide information around vulnerabilities that may inform future strategies. For example, where armed robberies in private spaces are concerned, there would seem to be little that can be offered by way of additional preventative advice. Indeed, the high prevalence of violence in such incidents may suggest that such offences are more often motivated by pre-planned aggression and intimidation than by the acquisition of property. Supporting victims and identifying those who may be vulnerable are two possible ways the impact of armed robbery in a private space could be mediated.

Alternatively, armed robberies in public spaces may best be addressed through a multi-pronged approach that incorporates the public, as well as police agencies. The results of UK-based initiatives that have tackled this problem are available to the general public (see Matthews 1996; Stockdale & Gresham 1998: Tillev et al. 2004). For example, results indicate that publicity that raises awareness among potential victims regarding activities that may increase their vulnerability (eg walking alone in secluded areas after dark) is valuable (Tilley et al. 2004). In addition, environmental measures can be employed in particularly vulnerable locations. Examples include ensuring public spaces have appropriate lighting to improve natural surveillance and are well-maintained and free of environmental debris such as unnecessary shrubs or trees (Tilley et al. 2004).

For insecure businesses, Gill (2000) recommends implementing prevention at the organisational, situational and social levels. While strategies implemented at the social level include new laws and political commitment, organisational and situational initiatives are more attainable for the small business. These include management techniques such as appropriately training and vetting staff and situational measures such as controlling entry and exit points to the premises or access to the property itself through the installation of time delay safes (Gill 2000). Other strategies such as high counters or fly-up screens may also effectively limit an offender's accessibility (Mayhew 2000).

In their research into effective crime prevention strategies for convenience stores and takeaways in the United States, Exum et al. (2010) noted that a one-sizefits-all approach was not effective. Stores had to be evaluated (and prevention strategies developed) on their own unique set of circumstances and characteristics. However, it is important to note that despite being particularly vulnerable to armed robbery, small businesses are often the least financially capable of implementing effective crime prevention strategies. Therefore, as well as tailoring approaches to each location, cost must also be considered an important factor.

Finally, this research also highlights important knowledge gaps in terms of understanding the nature of armed robbery. Importantly, robberies that occur in residences show a markedly different profile to those that occur across the other three locations. The involvement of drugs, the level of violence and the relatively high proportion of incidents involving offenders who were known to the victims are characteristics that stand out in residential armed robberies compared with other robbery types. This type of robbery may more closely resemble other types of interpersonal violence such as assault. If this is the case, then victims of residential armed robberies may require different types of support compared with other robbery victims.

In conclusion, the profiles presented in this article are not intended to perfectly describe every robbery that occurs in each location. Based on thematic analysis of 627 police narratives held by the AIC, the profiles capture common characteristics of armed robberies, including how the offender interacts with the environment, the property targeted and the influence of other factors such as alcohol and illicit drugs. It is intended that these profiles help inform future crime prevention initiatives, as well as contribute to a more considered understanding of armed robbery in Australia.

References

All URLs correct at April 2014

Alison L, Rockett W, Deprez S & Watts S 2000. Bandits, cowboys and robin's men: The facets of armed robbery, in Canter D & Alison L (eds), Profiling property crimes. UK: Dartmouth Publishing Company Ltd

Australian Institute of Criminology (AIC) 2013. Australian crime: Facts & figures. Canberra: AIC

Borzycki M & Fuller G 2014. Armed robbery in Australia 2009–2010: National Armed Robbery Monitoring Program report. Monitoring report no. 22. Canberra: Australian Institute of Criminology. http://aic.gov.au/publications/current%20series/ mr/21-40/mr22.html

Cohen L & Felson M 1979. Social change and crime rate trends: A routine activity approach. American Sociological Review (44): 588-608

Exum M, Kuhns J, Koch B & Johnson C 2010. An examination of situational crime prevention strategies across convenience stores and fastfood restaurants. Criminal Justice Policy Review 21: 269-295

Gabor T et al. 1987. Armed robbery: Cops, robbers and victims. US: Charles C Thomas Publisher

Gill M 2000. Commercial robbery: Offenders perspectives on security and crime. Great Britain: Blackstone Press Ltd

Hahn-Fox B & Farrington D 2012. Creating burglary profiles using latent class analysis: A new approach to offender profiling. Criminal Justice and Behavior 39(12): 1582-1611

Johnson H 2005. Crime victimisation in Australia: Key results of the 2004 International Crime Victimisation Survey. Research and Public Policy Series no. 64. Canberra: Australian Institute of Criminology. http://aic.gov.au/publications/ current%20series/rpp/61-80/rpp64.html

Matthews R 1996. Armed robbery: Two police responses. Crime Detection and Prevention Series no. 78. UK: Home Office Police Research Group

Matthews R 2002. Armed robbery. US: Williams **Publishing**

Mayhew C 2000. Violence in the workplace preventing armed robbery: A practice handbook. Canberra: Australian Institute of Criminology. http://www.aic.gov.au/documents/ F/6/C/%7BF6C0E6B6-CEAA-4838-A818-D077225D3E8E%7DRPP33.pdf

Mouzos J & Borzycki M 2003. An exploratory analysis of armed robbery in Australia. Technical and Background Paper Series no. 7. Canberra: Australian Institute of Criminology. http://aic. gov.au/publications/current%20series/tbp/1-20/ tbp007.html

Nugent S, Burns D, Wilson P & Chappell D 1989. Armed robbery from an offender's perspective: Implications for prevention. Canberra: Australian Institute of Criminology

Pink B 2011. Australian and New Zealand Standard Offence Classification (ANZSOC), Australia 2011, 3rd ed. Canberra: Australian Bureau of Statistics

Georgina Fuller is a Research Analyst in the Violence and Exploitation team at the Australian Institute of Criminology.

General editor, *Trends & issues* in crime and criminal justice series: Dr Adam M Tomison, Director, Australian Institute of Criminology

Note: Trends & issues in crime and criminal justice papers are peer reviewed

For a complete list and the full text of the papers in the *Trends & issues in crime and criminal justice* series, visit the AIC website at: aic.gov.au

ISSN 0817-8542 (Print) 1836-2206 (Online

Australian Institute of Criminology 2014

Canberra ACT 2601, Australia Tel: 02 6260 9200 Fax: 02 6260 9299

GPO Box 2944

Disclaimer: This research paper does not necessarily reflect the policy position of the Australian Government

Stockdale J & Gresham P 1998. Tackling street robbery: A comparative evaluation of Operation Eagle Eye. *Crime Detection and Prevention Series* no. 87. UK: Home Office Police Research Group

Tilley N et al. 2004. *Problem-solving street crime: Practice lessons from the Street Crime Initiative.* London: Home Office Research, Development and Statistics Directorate

Walsh D 1986. Heavy business: commercial burglary and robbery. London: Routledge & Kegan Paul