The role of detection avoidance behaviour in solving Australian homicides

Amber McKinley¹ and Claire Ferguson

ABSTRACT

Detection avoidance (DA) behaviours include removing evidence, manipulating bodies, and offenders protecting their identity, and staging the scene. There is a dearth of research on DA and its impact on homicide investigations. This study examines the role of DA in solving homicides in Victoria, Australia. It explores DA tactics used by offenders in 116 unsolved homicides, compares them to 35 solved homicides, and proposes a framework for their potential effect on solvability factors. The framework suggests that detection avoidance maps on to several solvability factors in complex ways, potentially complicating police investigations in a manner different to that anticipated. Future research is recommended.

Key Words: Australian homicide, Homicide solvability, Clearance rates, Detection avoidance.

INTRODUCTION

Homicides are rare in Australia and 10.5% are unsolved (Bricknell, 2019). This research is one of the first discussions of whether specific offender behaviour – detection avoidance – has the potential to impact solvability factors. Detection avoidance (DA) is when an offender attempts to hide, destroy or manipulate evidence to avoid detection and apprehension (Beauregard & Bouchard, 2010; Beauregard & Martineau, 2012, 2014). Extant literature on DA indicates that these behaviours most likely occur in homicides where victims and offenders are acquainted, when solvability factors would otherwise be present (Ferguson, 2015a; Schlesinger Gardenier, Jarvis, & Sheehan-Cook, 2012). This study explores the impact of offender DA behaviours on homicide solvability. It aims to unpack whether offender behaviour affects solvability in Australian homicides, and if so, how.

Australia's National Homicide Monitoring Program (NHMP) have collected since 1989, the most recent data (2015-2016) reveals approximately 264 incidents per annum; a rate of 0.9 per 100,000 with 10.5% remaining unsolved (Bryant & Bricknell, 2017).

Homicide solvability in Australia

Many factors influence police responses to homicide, which are unique to each community. These include rates of occurrence of known solvability factors, investigative procedures, case closure policies, and proactive efforts by police to prevent homicide. Solvability factors are elements discovered within the crime event that help investigators to identify the perpetrator and clear the case. These factors include (Geberth, 2015, McKinley, 2015):

- Suspect(s) can be identified, even if unknown to the victim;
- Suspect(s) are known to the victim;
- Suspect's vehicle can be described and identified;
- A modus operandi is present which fits an established crime pattern;
- Suspect(s) have specific knowledge of crime scene;
- The presence of physical evidence; and

¹ Corresponding author: amckinley@csu.edu.au

Belief that the crime may be solved with publicity or additional investigative effort.

While these factors appear within Australia and internationally, little empirical work has been done here in the last 20 years. Additionally, little research relating to homicide solvability in Australia or elsewhere mentions the fact that perpetrators actively thwart investigative efforts through DA.

Internationally, two theories of homicide solvability have been proposed to explain why some homicides remain unsolved. The discretionary perspective maintains that whether a homicide is cleared depends on the victim's characteristics and the crime location, where detectives use their discretion to preference cases involving victims whose class, race, sex, and age make them worthy of persistence (Carter & Carter, 2016; Riedel, 2008). The non-discretionary theory, conversely, holds that public and organizational pressure leads investigators to work equally on all homicide cases (Riedel, 2008). Though there is modest support for both theories, studies have found that non-discretionary factors, like physical evidence and cooperativeness of witnesses affect solve rates more significantly, at least in the USA (Bynum, Cordner, & Green, 1982; Carter & Carter, 2016; Roberts, 2007).

Literature related to investigator discretion in Australia has only examined police interaction with Indigenous people, family and domestic violence reports, and people living with mental illness, not homicide (Godfredson, Ogloff, Thomas & Luebbers, 2010; Parker & Sarre, 2008; Scott & Jobes, 2007). Therefore, little can be said about police discretion and homicide solvability in Australia.

Research that is available in Australia suggests the process of solving a homicide is extremely complex (McKinley, 2015). Solvability has been directly related to systemic factors like police training, education, management styles, and budget restrictions (Geberth, 2015; McKinley, 2015). There are a multitude of other factors outside of police institutions impacting solvability such as bystander interaction, conditions of or at the crime scene (before to police attendance) and, we propose, DA behaviours of offenders (Beauregard & Field, 2008; Ferguson, 2015b). When the perpetrator alters the crime scene, interferes with evidence or disposes of the body to avoid detection, known solvability factors may be affected, and efforts to clear the case compromised (Ferguson & Pooley, 2019; McKinley, 2015).

Detection Avoidance in Homicide

DA behaviours have also been referred to as countermeasures, forensic awareness, precautionary acts and adaptive behaviours in the criminology and forensic psychology literature (Neimeyer, Pepper, & Salfati, 2008; Turvey, 2012). Though many offenders would prefer to avoid detection, only a few authors have examined how countermeasures are employed by offenders and the impacts on solvability. The existing limited literature tentatively proposes: 1) different DA behaviours are used by different types of offenders; 2) countermeasures increase in number and sophistication when victims and offenders have a previous relationship; 3) the number of offenders using DA is increasing; and 4) these efforts are detrimental to investigating and prosecuting homicides.

Literature examining DA in general is scarce, and only a few studies focus on homicide. behaviour in 2008, Neimeyer, Pepper and Salfati examined 85 solved serial homicide cases involving 17 offenders. In this sample, less than 20% of offenders used 'adaptive behaviours' to avoid detection. Brown and Keppel (2012) studied 347 child homicides from the USA and found about half (52.7%) employed countermeasures.

Beauregard and Martineau (2014) examined 350 Canadian solved and unsolved sexual homicides, measuring 16 different aspects of DA. They determined that 45.7% (n = 160) of all murderers sampled carried out at least one DA strategy, and 81% had selected their victims

at random (i.e. stranger homicides). Of the total sample, 30.6% destroyed evidence, 11.1% disposed of the victim's body, 4.3% protected their identity, 11.4% acted on the victim or environment (by locking the victim in, for example), 0.9% staged the crime scene, and 12% used other precautions, such as securing an alibi or using a look-out. Precautions in particular were more likely to be found in solved than unsolved cases. However, generally speaking the literature shows that where DA is present, the case has a higher chance of remaining unsolved. The present study will address the shortfall of information relating to DA homicide solvability in Australia.

METHODOLOGY

This analysis explored whether DA affects homicide solvability in Australia, and if so, how? A sample of unsolved homicides from a publicly available database was compared to a sample of solved cases from the same area and approximate period. For unsolved cases, publicly available data offered the best potential for estimating DA behaviours due to its availability and standardised collection. While official documents would likely provide more qualitative detail, official data on unsolved homicides in Australia is difficult to access due to the lack of central or state-wide databases containing details on DA, and police confidentiality. To avoid these difficulties and maximise the sample of unsolved cases, a database compiled by an Australian media outlet was used. The database was accessed free online, with additional details available by paid subscription. The database contained details of 137 unsolved homicide cases from the state of Victoria, spanning from 1975 to 2016. Each case contained incident level data, including: victim(s) name(s), suburb, date of homicide or disappearance, age of the victim(s), sex, street, council, post code, cause of death, a summary of facts, latest investigative development, lines of inquiry, map, and links to additional resources.

Each one of the 137 cases was examined to determine whether they were unsolved as of November 2019. Unsolved cases were defined as those where a conviction for murder or another charge had not been achieved. Cases involving arrests but no charges, charges being dropped, acquittals, or suspects being deceased and never convicted were included because they remain 'on the books' for police purposes and may evidence particular DA behaviours which prevented a conviction being achieved despite a suspect being known.

A group of solved cases was sampled and analysed for comparison to the unsolved cases. Summaries from court decisions, sentencing documents and appeal documents were gathered from the Victorian case law section of the legal database Austlii. This section was searched using the term "murder", and 3089 results were returned. Cases were assessed to determine if they involved a homicide and contained a summary of facts.

The first 35 cases that were completed homicides and involved a conviction for murder or manslaughter were included in the comparison sample. Duplicate cases and those involving a charge of inciting murder or attempted murder were not included, but those involving both trials and guilty pleas were included.

Procedure

After 137 unsolved and 35 solved cases were identified for the sample, case summaries from each of the databases were assessed to determine whether and which DA behaviours were present, for example: the body being dumped somewhere or the victim's car being set on fire. As per the literature (Beauregard & Martineau, 2014; Brown & Keppel, 2012; Pepper & Salfati, 2008) the DA behaviours coders considered: homicide planning (such as when offenders laid in wait and executed the victim), manipulation of the victim's body (for example disposing of, hiding or covering the body), destruction of evidence (such as cleaning up or arson), acting on

the victim or environment (tying the victim up, locking them in, disabling phones), offender protecting their identity (wearing a disguise, gloves or using a condom), staging the crime scene (manipulating the scene, for example making a homicide appear as a suicide), verbal staging (disposing of the victim's body and reporting them missing), using other precautions (for example securing an alibi), abducting the victim, and suspect(s) leaving the country. Additional information on unsolved cases was sought from other publicly available sources such as detailed coronial inquest findings and media articles, where necessary.

RESULTS

Descriptive Findings

Summaries of 137 unsolved homicides were examined and descriptive analyses completed. Unsolved cases are compared to solved cases in the following section. Upon initial analysis, all 137 cases were unsolved as per the definition: where a conviction for murder or another charge related to the death had not been achieved. However, 21 cases were removed because homicide could not be established. In all of the 21 cases removed, the victim's body had never been found and a lack of other evidence meant it could not be determined that they were killed by someone else. Cases where the victim's body was not recovered but other evidence led to coroners deeming the death as a homicide remained in the sample. After no body, suspicious disappearances were removed, the sample consisted of 116 known unsolved homicides.

Unsolved cases from 1975 to 2016 involved 129 victims. Two cases involved triple murders, 9 cases involved double murders, and 105 cases involved single victims. Thirty-five cases were gang or organised crime related (executions), two were murders in prison, three were infanticides and one was a triple homicide; secondary to arson. The circumstances of the remaining cases were unknown, with some thought to be sexually motivated, some suspected as domestic violence homicides, and others random attacks.

Unsolved versus solved cases

Pearson's chi-square (χ 2) tests of independence were performed to determine if there were statistically significant associations between any of the DA behaviours and whether the homicide was solved or unsolved. For each cross-tabulation, where greater than 20.0% of cells had expected counts of less than 5, significant likelihood ratios (LR) are reported rather than Pearson's chi-square values.

As can be seen by the frequencies cross-tabulated in Table 1, there was a significant relationship between the number of DA behaviours present, and whether the homicide was solved LR (4, N=103) = 23.87, p<.01. Unsolved cases generally involved only one known DA behaviour, whereas solved cases often involved more than one. In solved cases, the average number of known DA behaviours was 1.71, whereas in the unsolved cases, the average number of DA behaviours was 1.42. There was also a significant association between destroying evidence and solvability $\chi 2$ (1, N=151) = 45.58, p<.001. Solved cases were more likely to involve known evidence destruction than unsolved cases. Within evidence destruction, arson appeared specifically important, with it being known that arson was involved more often in solved cases than in unsolved cases LR (1, N=151) = 13.33, p<.01. There was a significant relationship between the offender acting on the victim or environment (such as by binding the victim or using a look-out) and the homicide being solved LR (1, N=151) = 5.35, p<.05. Unsolved cases appeared less likely to involve known attempts to act on victims or the environment.

Table 1: Known detection avoidance behaviours in solved and unsolved Australian homicides

DA behaviour known	Unsolved	Solved
	n (%)	n (%)
Planning the homicide	35 (30.2)	9(25.7)
Manipulation of the victim's body	35 (30.2)	11 (31.4)
Destruction or removal of evidence***	15 (12.9)	24 (68.6)
Arson**	3 (2.6)	8 (22.9)
Acting on the victim or environment*	7 (6.0)	7 (20.0)
Offender protecting their identity	6 (5.2)	5 (14.3)
Staging the crime scene	5 (4.3)	1 (2.9)
Verbal staging	3 (2.6)	0 (0)
Using other precautions	0	1 (2.9)
Abducting the victim	4 (3.4)	3 (8.6)
Suspect leaving the country	4 (3.4)	0 (0)
Total cases involving known DA	82 (70.7)	25 (71.4)
Count of DA behaviours present ***		
1	50 (64.1)	5 (20.0)
2	23 (29.5)	10 (40.0)
3	5 (6.4)	7 (28.0)
4	0 (0)	1 (4.0)
5	0 (0)	2 (8.0)
Average count of DA behaviours (when present)	1.42 behaviours	1.71behaviours
No known DA present	34 (29.3)	10 (28.6)

^{*}significant to p < .05

DISCUSSION

Over two-thirds of solved and unsolved cases in Victoria involved some DA behaviour. Results from international samples indicate rates of DA range from approximately 20% to 52% in different types of homicides and different regions, suggesting levels of DA in Australian samples are comparatively high (Brown & Keppel, 2012; Neimeyer, Pepper & Salfati, 2008). The type and number of DA found in solved versus unsolved cases in Australia indicate a relationship between DA behaviour and solvability, although perhaps in more complex form than found in other research. That is, the current findings suggest that establishing the presence of DA by offenders may be positively related to police solving the homicide. This indicates two things: that DA can be overcome and homicides solved despite its impacts, and that establishing DA has been used by offenders may be an important step towards counteracting the ill-effects of DA behaviour.

When compared with the solved sample, the specific DA tactics used in the unsolved sample show the potential impact of each behaviour on police solving the homicide. For example, in unsolved cases it was much less likely that evidence destruction had been established, suggesting that investigators determining evidence has been destroyed or removed may be important to solvability. An example from the unsolved cases is illustrative of how a failure to recognise that evidence has been destroyed may impede known solvability factors the unsolved case of teenager Karmen Chan. In Chan's matter there was early evidence that she had been abducted, raped, and murdered, and her skeletal remains were found a year later with three bullet wounds in the back of her skull. She was thought to be the fourth victim of a serial rapist due to her case matching a known pattern in his MO. This offender washed his victims, meticulously planned the event, and carried numerous weapons. In this case, while it is suspected that the victim was washed and weapons disposed of, the nature of these

^{**}significant to p < .01

^{***}significant to p < .001

behaviours means that they cannot be certainly established. Even with establishing the victim has been abducted and raped, and the presence of a known pattern in MO, the nature of the presumed DA and associated absence of physical evidence in this case appears to have greatly impacted solvability.

Establishing the use of arson is an important factor in solving the sampled cases, perhaps helping to explain the absence of other evidence key to investigative progress. Other Australian research shows that arson used to destroy evidence or mutilate bodies complicates an investigation due to important evidence being absent. However the lack of this evidence does not preclude solvability (Ferguson et al, 2015). Failing to establish that fire has been used may create difficulties in addition to evidence being unavailable. For example, arson associated homicides across Australia often involve high levels of planning and premeditation, factors that can impact solvability. Together these findings show layers of complexity are added through arson, despite other positive solvability factors present, such as relationships between victims and offenders (Ferguson et al., 2015).

As an example, in the matter of Kath Bergamin, who was abducted and murdered in 2002, arson appears to have played an important role. A day after Bergamin's disappearance, fire engulfed a car used by her adult son on her estranged husband's farm. Her remains have never been found. Charges were laid against her estranged husband, however they were later dropped due to lack of evidence. While it is known that fire is likely to have been involved in this homicide, whether the fire was deliberately lit could not be established due to the nature of fire and corresponding ambiguities in the evidence. The fire effectively hindered physical evidence being collected from the vehicle which might have allowed for associations to be made between the victim, the vehicle, the suspects and the presumed disposal site of her body, resulting in a lack of evidence and negative searches for the victim's remains.

In the unsolved sample, only 6.0% of offenders are known to have acted on the victim or environment (by binding, drugging them, or locking them in), whereas 20.0% of cases in the solved sample involved similar behaviours. Similarly, in the solved and unsolved Canadian homicide sample, 15.6% of offenders in the solved cases acted on the victim or environment, and only 1.0% in the unsolved cases. This highlights the importance of establishing how victims are subdued. A failure to determine if victims have been acted upon by offenders may prevent MO and pattern associations being made, or may fail to explain a lack of surveillance by witnesses and cameras. It may also be the case that acting on the victim or environments creates additional evidence and positive solvability factors, meaning that investigations may benefit by looking for such behaviours. So, despite being counterintuitive, acting on the victim may increase the chance of a homicide being solved, as indicated here and in the international literature (Beauregard & Martineau, 2014).

In the unsolved case of 13-year-old Clare Morrison, DA in the form of disposing of the victim's body at sea effectively prohibited investigators determining medical cause of death, whether a sex crime was involved, and whether and how the victim was acted upon to subdue and contain her. This led to difficulties in determining whether Morrison might have been abducted and killed by a sex offender with a known MO, or not. The victim was last seen walking down the road and was missing for only 7 hours before her body was discovered. Unfortunately, her disposal at sea led to her body being mauled by a shark, effectively impacting on several solvability factors and preventing the homicide being cleared.

Finally, the number of DA behaviours used differed between solved and unsolved cases, with solved cases involving higher counts of DA behaviours than unsolved cases. While counter-intuitive, this finding indicates that discovering the true extent of DA behaviours used by offenders may be positively associated with solving the homicide. It may also be that, while DA is designed to hamper investigations, establishing the presence of several DA behaviours is important circumstantial evidence, pointing to parties responsible and creating other avenues

of inquiry. Where it has not been established if DA behaviours have been carried out, establishing circumstantial patterns to produce new leads may remain elusive.

The case of Lucia Amenta provides an illustrative example. In this case, almost nothing is known about how the victim disappeared or came to be deceased. Almost no evidence is available to specifically determine whether DA behaviours were perpetrated, except to say that her body was placed into a barrel, weighted and put into water. By the time her body was discovered, the 70-year-old had been missing for 21 months. The forensic pathologist was not able to determine the time since death with any degree of certainty as the rate of decomposition was considered extremely variable and dependent upon a number of factors. The time when the victim went missing, how and where she was killed, and the use of any other DA behaviours remain unknown. In this case, despite it being intuitive that other DA behaviours have been used by the offender to avoid detection, the significant impact of the one known behaviour, disposing of the victim's body, means that no others can be ascertained, and the homicide remains unsolved.

In combination the current findings and the available literature indicate that the use of some DA behaviours is related to homicide solvability, however, with a more complex interplay of factors than anticipated and discussed in the available research.

Given the findings of this analysis and the literature on both DA and solvability, it is clear that the use of DA strategies can impact on solvability. In this sample it appears that the relationship between DA and solvability may be multifaceted. Rather than DA behaviours simply preventing homicides from being solved, failing to establish the presence of some DA behaviours may also work in concert with other factors to impact solvability. For example, while countermeasures like disposing of a victim's body may create the opportunity for evidence to be lost or contaminated, it may also cause the homicide to remain undiscovered for some time, ensuring the most basic facts cannot easily be established. Destruction of evidence may prevent links being made between victims, vehicles, and crime scenes, making it unclear how the homicide was perpetrated. DA behaviours related to crime scene staging may confuse the manner of death determinations and result in delays due to the necessity of a more detailed assessment of suspicious deaths. Other DA behaviours may obscure links between victims and offenders, confuse the assessment of MO, or limit the utility of witness statements.

Limitations of the study

This examination of the role of DA on solving homicides is limited in several ways. First, by nature of the research questions, this project was limited by the difficulty of comprehensively examining DA behaviours in unsolved homicide cases. Because unsolved cases have unknown offenders, the level and type of DA present and its effect on the investigation can be difficult to measure, and levels of DA may be underestimated, especially in comparison with the solved cases. In unsolved cases it cannot be known if offenders took additional steps to avoid detection, beyond what is obvious at the crime scene, from the circumstances, or from available witnesses. It should be noted therefore that rates of DA reported in the unsolved cases are likely conservative, measuring only the most overt DA behaviours used by offenders.

Using publicly available data sources, compiled by the media for the unsolved sample, also creates a series of limitations in the results of this project. Since media data is not officially collected its reliability is unknown. It would be expected that hold back information, commonly not released publicly by police, which could be relevant to DA would not be accounted for here. Moreover, the brevity of the summaries, even with the additional materials examined also means that relevant DA behaviours might not be accounted for in this analysis. Reliability problems in the unsolved sample are tempered by the fact that this analysis sought only to count

the most obvious DA behaviours, those which could be established without the homicide having been solved.

The unsolved homicide database also limits the generalisability of the findings since it is not known how cases are added to the database or whether any are missing. The impact of this issue on the results is reduced due to the exploratory nature of the study, and since we do not try to generalise from the findings. However, it is acknowledged as a limitation.

CONCLUSION

Despite having high solve rates relative to other nations, 11% of homicides in Australia remain unsolved (Bryant & Bricknell, 2017). Along with the absence of known solvability factors, a failure to solve many of these cases may be due to high levels of DA behaviours perpetrated by offenders. This research is one of the first discussions of whether and how DA impacts on solving homicides. Findings show that unsolved cases in Australia evidence a lot of DA, and that common behaviours have a complex relationship with known solvability factors, potentially preventing homicides being solved.

Specifically, establishing that offenders have destroyed or removed evidence, especially through the use of arson; uncovering whether and how victims were controlled or contained; and effectively recognising the number of DA behaviours perpetrated all appear to be related to whether a homicide is solved. The framework proposes that destroying evidence may prevent persons of interest being identified; obscure relationships between victims, offenders, vehicles and crime scenes; and confuse pattern associations. Acting on a victim or their environment to contain them may obscure the MO and prevent pattern associations being made, as well as prevent surveillance through witnesses or cameras. The use of multiple forms of DA may compound issues associated with a lack of physical evidence, negative crime scene searches and difficulties associating victims with persons of interest, amongst other things. However, this analysis has shown that issues created by the use of DA can be overcome when the behaviour is identified. Indeed, the presence of DA may even assist with clarifying theories in the investigation, produce useful circumstantial evidence, and create additional evidence of DA behaviours. A failure to establish that DA has been used produces all the obstacles outlined, but may also fail to take advantage of the opportunity created by the use of DA behaviours. Together with other challenges common to homicide investigations, such as a lack of cooperating witnesses, impacts such as these appear to have the potential to hinder successful homicide investigations. Additional research is required to demonstrate and quantify the effect of DA behaviours on solvability factors. Research should focus on how to limit the impacts of DA through investigator training and frontloading of police resources at the outset of investigations involving possible DA behaviours.

REFERENCES

- Beauregard, E. & Bouchard, M. (2010). Cleaning up your act: Forensic awareness as a detection avoidance strategy. *Journal of Criminal Justice*, 38, 1160-1166.
- Beauregard, E. & Martineau, M. (2012). A descriptive study of sexual homicide in Canada: Implications for police investigation. *International Journal of Offender Therapy and Comparative Criminology*, 57(12), 1454-1476.
- Beauregard, E. & Martineau, M. (2014). No body, no crime? The role of forensic awareness in avoiding police detection in cases of sexual homicide. *Journal of Criminal Justice*, 42, 213-220.

- Beauregard, E., & Field, J. (2008). Body disposal patterns of sexual murderers: Implications for offender profiling. *Journal of Police and Criminal Psychology*, 23(2), 81.
- Bricknell, S., (2019) Homicide in Australia 2015–16. Australian Institute of Criminology. Canberra.
- Brown, K. & Keppel, R. (2012). Child abduction murder: The impact of forensic evidence on solvability. *Journal of Forensic Sciences*, *57*(2), 353-353.
- Bryant, W., & Bricknell, S., (2017) Homicide in Australia 2012-13 to 2013-14: National Homicide Monitoring Program report. Australian Institute of Criminology Statistical Report 02. Retrieved at: https://aic.gov.au/publications/sr/sr002
- Carter, D. & Carter, J. (2016). Effective police homicide investigations: From seven cities with high clearance rates. Homicide Studies, 20(2), 150-176.
- Ferguson, C. (2015a). Staged homicides: An examination of common features of faked burglaries, suicides, accidents and car accidents. *Journal of Police and Criminal Psychology*, 30(3), 139-157.
- Ferguson, C. (2015b). Detecting staged crime scenes: An empirically derived how-to. In Petherick, W.A. (ed.). *Applied Crime Analysis: A Social Science Approach to Understanding Crime, Criminals, and Victims* (pp. 80-100). Anderson Publishing.
- Ferguson, C. & Pooley, K. (2019). Comparing solved and unsolved no-body homicides in Australia: An exploratory analysis. *Homicide Studies*; 23(4):381-403.
- Ferguson, C., Doley, R., Watt, B., Lyneham, M., & Payne, J. (2015). Arson associated homicide in Australia: a 5-year follow up. *Trends and Issues in Criminology, No. 484*. Australian Institute of Criminology.
- Geberth, V. (2015). Practical homicide investigation: Tactics, Procedures and Forensic Techniques (5th ed.). CRC Press
- Godfredson, J. W., Ogloff, J. R., Thomas, S. D., & Luebbers, S. (2010). Police discretion and encounters with people experiencing mental illness: The significant factors. *Criminal Justice and Behaviour*, *37*(12), 1392-1405.
- McKinley, A., (2015). Homicide Solvability and Applied Victimology in New South Wales, 1994-2013. Unpublished thesis. Bond University, Queensland.
- Neimeyer, E., Pepper, K., & Salfati, G. (2008) Avoiding detection: An examination of adaptive and maladaptive behaviours in serial homicide. Paper presented at the American Society of Criminology Annual Meeting, St. Louis, MO.
- Parker, A. L. & Sarre, R. (2008). Policing young offenders: What role discretion? *International Journal of Police Science & Management*, 10(4), 474-485.
- Riedel, M. (2008). Homicide arrest clearances: A review of the literature. *Sociology Compass*, 2, 1145-1164.
- Roberts, A. (2007). Predictors of homicide clearance by arrest: An event history analysis of NIBRS incidents. *Homicide Studies*, 11(2), 82-93.
- Schlesinger, L., Gardenier, A., Jarvis, J. & Sheehan-Cook, J. (2012). Crime scene staging in homicide. *Journal of Police and Criminal Psychology*, 29, 44-51.
- Scott, J., & Jobes, P. C. (2007). Policing in rural Australia: The country cop as law enforcer and local resident. *Crime in Rural Australia*, 127-137.
- Turvey, B. (2012). Criminal Profiling (4th ed.). Academic Press.

ABOUT THE AUTHORS

Dr. Amber McKinley (B.LibS, MCJ, PhD) is a Clinical and Forensic Victimologist and a senior lecturer at Charles Sturt University. She coordinates and lectures in Victimology and Human trafficking. She holds a Bachelor of Liberal Studies, a Master of Criminal Justice and,

a Doctor of Philosophy. Her current research includes: the history of Australian familicide from 1816 – 2021; victims of serial homicide in Australia from 1820-2021 and homicide solvability. Amber works with the Australian Defence Force, Joint Military Police Unit.

Dr. Claire Ferguson is a Senior Lecturer and researcher in the School of Justice, at Queensland University of Technology. Claire's work seeks to bridge the gap between academic research and forensic case work in complex death investigations. While she has published over 40 academic articles in many traditional journals, she also uses the research to inform training and expert consultancy for assisting police, attorneys, and Coroners investigating missing persons, equivocal deaths, and suspected homicides.