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Abstract | This study analyses the criminal histories of Australian organised crime offenders.

Most offenders associated with organised crime groups did not commit their first offence until adulthood; nearly one-third were aged 25 years or older when they committed their first offence. Offending was most common, and remained relatively stable, throughout their 20s and early 30s. Offending frequency gradually increased during this period, as did the seriousness of offences committed.

Age at first offence and prevalence of offending varied by crime type. Certain offences—particularly those associated with organised crime were more common among older offenders.

As the first attempt to analyse the criminal histories of organised crime offenders in Australia, this study offers new insights into the extent, nature and seriousness of offending, which will help shape policy responses to organised crime.

Criminal histories of Australian organised crime offenders

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Organised crime is one of the most persistent and complex threats currently affecting Australia and was estimated to have cost up to \$47.4b in 2016-17 (Smith 2018). While the nature of organised crime offending is well understood (Australian Criminal Intelligence Commission (ACIC) 2017), much less is known about the criminal histories of those who engage in such offending.

Research into organised crime in Australia has been limited by a lack of publicly available data and adequate samples for study. International research, particularly from the United Kingdom and the Netherlands, has provided valuable insight into the nature of organised crime and its members. However, the extent to which the findings of international research about the nature, frequency and seriousness of organised crime are relevant to Australia is unclear.

Australian law enforcement and criminal intelligence agencies have been collecting information on organised crime offenders and threats for many years. These intelligence collections provide a valuable opportunity to profile Australian organised crime offenders and inform ongoing prevention and disruption strategies.



The current research examined data from the Australian Criminal Intelligence Commission's National Criminal Target List (NCTL) and National Police Reference System (NPRS). Its aim was to provide an aggregate profile of the criminal histories of a sample of offenders associated with organised crime groups, to help inform proactive government and law enforcement strategies.

Prior research

'Organised crime' is an umbrella term that describes an array of different crime types, illicit behaviours and offender group configurations (see ACC 2015; Albanese 2000; Edwards & Levi 2008; Hobbs 2013; van Koppen & de Poot 2013). The *Australian Crime Commission Act 2002* (Cth) adopts a broad definition and describes serious and organised crime as an offence that involves two or more offenders and substantial planning and organisation, that typically involves sophisticated methods and techniques, that is typically committed in conjunction with other similar offences, and that involves one of a number of specified offences.

Organised crime groups are heavily involved in domestic and global illicit drug markets, as well as fraud, smuggling (goods and people), violence and intimidation, corruption, money laundering, firearms offences, cybercrime, and environmental crime (ACIC 2017; Brown & Smith forthcoming). These offences can be highly sophisticated, so organised crime groups rely on trusted networks to plan and implement their crimes. These networks may comprise multiple individuals fulfilling different roles. Such offenders may therefore vary in their skills, knowledge and specialisation (Hobbs 2013; Kleemans & de Poot 2008; National Crime Agency 2016; van Koppen, de Poot & Blokland 2010; van Koppen et al. 2010).

International studies have explored the patterns and types of offending by individuals involved in organised crime groups with the aim of identifying potential intervention points (Francis et al. 2013; Kleemans & de Poot 2008; Pedersen 2018; Savona et al. 2017; van Koppen et al. 2010). Several studies from the United Kingdom and the Netherlands have compared organised crime offenders with non-organised crime offenders to understand the similarities, differences and overlap between these two groups. A study by Kleemans and de Poot (2008) was one of the first to explicitly examine organised crime offenders' criminal careers. They drew on information from the Dutch Judicial Documentation System and closed police investigations to identify and analyse a sample of 979 offenders. Later Dutch studies by van Koppen and colleagues used similar datasets to examine organised crime offenders' criminal career trajectories (van Koppen et al. 2010) and to compare this group with non-organised crime offenders (van Koppen, de Poot & Blokland 2010).

More recently, Francis et al. (2013) conducted a comprehensive study of UK organised crime offenders' criminal careers. Using the Police National Computer (a registry of all offenders sanctioned in England and Wales), over 4,100 individuals were identified as being involved in organised crime based on the types of offences they had committed and the sentences they had received. This sample was then matched with two comparison groups of similar sizes: serious offenders and non-serious, non-organised, volume crime offenders.

These international studies provide valuable insights into the unique characteristics of organised crime offenders. Organised crime offenders were found to be overwhelmingly male—upwards of 90 percent of the UK, Dutch and Italian samples (Francis et al. 2013; Kleemans & de Poot 2008;

Savona et al. 2017; van Koppen et al. 2010; van Koppen, de Poot & Blokland 2010). Organised crime offenders, compared with volume crime offenders, were also found to start their criminal careers later in life; however, age of onset varied between studies. Organised crime offenders in the three Dutch studies were aged, on average, between 24 and 27 years at their first judicial contact (Kleemans & de Poot 2008; van Koppen et al. 2010; van Koppen, de Poot & Blokland 2010). UK organised crime offenders were younger: aged, on average, 19 years at the time of their first police sanction (Francis et al. 2013). Despite these differences, these findings contrast with previous literature on the age of onset for volume crime offenders. Prior research indicates the majority of volume crime offenders begin offending in mid-adolescence and desist in their early 20s (see Moffitt 1993; Weatherburn, Freeman & Holmes 2014). In comparison, the Dutch and UK studies suggest organised crime offenders begin their criminal careers at the age when volume offenders' careers typically finish.

Van Koppen et al. (2010) and Francis et al. (2013) also examined the frequency of offending by organised crime offenders. These studies counted the number of contacts with the judicial system and number of police sanctions recorded between an offender's first contact/sanction and their inclusion offence (the organised crime offence for which they were included in the relevant study). Findings varied between the Dutch and UK samples. Van Koppen et al. (2010), for example, found Dutch organised crime offenders had, on average, seven judicial records prior to their inclusion offence. In contrast, Francis et al. (2013) found British organised crime offenders had received 21 sanctions, on average, prior to their inclusion offence, compared with an average of seven sanctions among volume crime offenders. This substantial variation between studies may be explained by methodological differences. These studies therefore present a mixed picture of the frequency of offending by organised crime offenders.

Organised crime offenders also appear to commit more serious offences than non-organised offenders. Van Koppen, de Poot and Blokland (2010) measured the seriousness of offenders' criminal histories by calculating the average number of years each individual had served in prison. They found organised crime offenders committed more serious crimes than general offenders. In particular, organised offenders committed greater numbers of organised frauds and drug offences—crimes which typically result in more severe penalties. Blokland et al. (2017) found outlaw motorcycle gang (OMCG) members had more convictions than average Dutch motorcyclists, including convictions for serious and violent crimes. Similarly, Pederson (2018) found OMCG members in Denmark were more likely to commit a violent offence as their first offence and had a criminal history with more violence than a matched group of non-gang members. These findings suggest the criminal histories of organised crime offenders are characterised by more serious crimes.

Organised crime offenders also tend to be generalists rather than specialists. Francis et al. (2013) examined the extent to which the organised criminals in their UK sample were specialist offenders who tended to commit the same type of offence throughout their criminal career. Specialisation was determined by calculating the proportion of an offender's criminal career attributable to each crime type. Only 12 percent of organised crime offenders were considered specialists compared with 19 percent of non-organised crime offenders (Francis et al. 2013). Savona et al. (2017) found similar low levels of specialisation among Mafia members in Italy. This suggests that the majority of organised crime offenders engage in multiple crime types, including crime types not related to organised criminal activity, throughout their career.

To date, there have been no similar attempts to examine the criminal histories of Australian organised crime offenders. International research suggests serious and organised crime offenders are older than volume crime offenders and have different offending patterns. Interventions developed to prevent the onset of offending among offenders generally may therefore not be relevant to, nor have the same impact on, organised crime. Examining Australian organised crime offenders' criminal histories will not only determine the extent to which international research findings are relevant but also inform government and law enforcement strategies to disrupt and prevent organised criminal activity.

Method

Research questions

The current study explored the criminal histories of a sample of individuals identified by law enforcement as being associated with an organised crime group. This study aimed to address the following research questions:

- At what age do individuals associated with organised crime groups first come into contact with the criminal justice system?
- How does the prevalence, incidence and severity of offending vary over time?
- How does the age of first offence and prevalence of offending vary between different offence types, particularly those more likely to be associated with organised crime groups?

Sample

The current research examined the criminal histories of 2,172 offenders identified as being affiliated with an organised crime group. This sample was created by matching records from two ACIC intelligence databases: the National Criminal Target List and the National Police Reference System.

National Criminal Target List

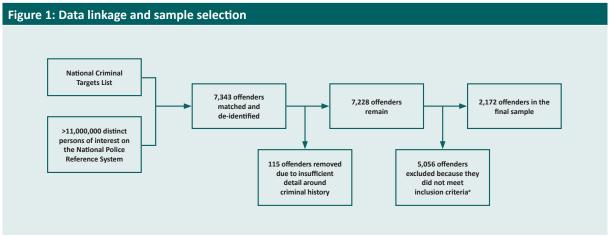
The NCTL is an intelligence tool that holds information on active and nationally significant serious and organised crime targets who have been reported to the ACIC as operating in or affecting Australia. It was developed in 2010 and is shared with state and territory law enforcement agencies, the Australian Federal Police, other relevant government agencies and international partners. Targets added to the NCTL are assessed for the level of risk associated with their criminal activity and their real or potential impact on the Australian community.

National Police Reference System

The NPRS holds current and detailed national police information designed to assist operational police throughout Australia in dealing with and responding to persons of interest. The system contains offender information including names and photographs; information on warnings, warrants and wanted persons; apprehension and offence history; protection orders; history of firearm ownership or use; and information relating to the child protection register. Offences listed on the NPRS are not limited to crimes for which a person has been convicted. Rather, the system contains information on offences for which they have been apprehended by police. All state, territory and Commonwealth law enforcement agencies have used the NPRS since the early 1990s, and the ACIC has administrative oversight of the system.

Data linkage and sample selection

Figure 1 outlines the data linkage and sample selection process. The ACIC's Data Analytics team generated an initial sample by matching individuals who have been added to the NCTL with their criminal histories on the NPRS, using their name, date of birth and residential address at the time of the offence. A total of 7,343 offenders were successfully linked between these two systems. This initial sample was then de-identified before being transferred to the Australian Institute of Criminology. The dataset contained seven variables: a unique identifier, the offender's year of birth, the offender's gender, offence type (Australian and New Zealand Standard Offence Classification, or ANZSOC), the year the offender was processed for the offence, the current status of the offence, and the year the offender was added to the NCTL.



a: Offenders were excluded for a variety of reasons including being born prior to 1980, missing year of birth, or because they had only committed minor traffic offences

Source: AIC organised crime offender database, 2017 [computer file]

The criminal histories of 115 offenders contained insufficient detail, so these offenders were removed from the sample. The research team then applied inclusion criteria to ensure the sample was comparable and consistent. A total of 5,056 offenders were subsequently removed from the sample because they had only committed minor traffic offences such as speeding, their year of birth was not recorded, or they were born before 1980. Exploratory analysis of offence histories indicated that the NPRS did not capture information on offences for all Australian jurisdictions until the early 1990s. Offenders born before 1980 may have been apprehended for offences that were not recorded in the NPRS. The final sample was therefore limited to offenders born in or after 1980, and included all offences committed up to and including 2016. Limiting the sample to this group ensured the entirety of each offender's recorded criminal history was included in the data. The final sample comprised 2,172 offenders who collectively committed 37,689 offences. Ninety-two percent (n=1,994) of offenders in the sample were male and six percent (n=141) were female. The gender of two percent (n=37) of offenders was unknown.

Limitations

The final sample was limited to individuals who have been identified by law enforcement as being affiliated with an organised crime group and who have a criminal offence history in Australia. Individuals may be listed on the NCTL despite having no known or recorded criminal history in Australia; however, these people would have been excluded during the initial matching process because there was no corresponding apprehension data in the NPRS. It is acknowledged that not all individuals involved in organised crime, particularly those who are successful at evading detection, will have been arrested or have a criminal record (Francis et al. 2013). If they do have one, it may be for offences committed in another country, meaning a small number of offenders may appear to be first-time offenders when in fact they have an extensive criminal history (Francis et al. 2013; van Koppen, de Poot & Blokland 2010). Further, it was not possible to account for the time spent in custody due to the absence of custodial data, which may be significant given the seriousness of offences committed by the sample.

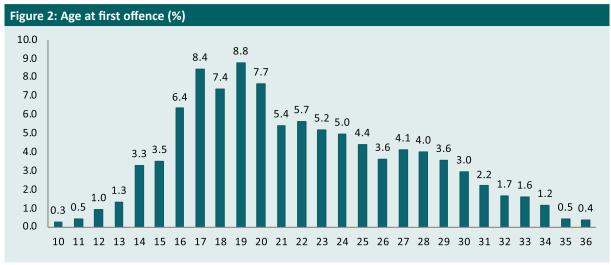
Limiting the sample to those offenders who were born in 1980 or later means the findings may not be generalisable to the wider population of offenders included on the NCTL. This is particularly true for older offenders, including those who did not commit their first offence, or were not apprehended, until relatively late in life (older than 36 years). While there have been some notable findings relating to this older cohort in studies conducted in the United Kingdom and the Netherlands, Australian national criminal history data are limited to the last two decades, and international research shows there remains significant value in understanding patterns in offending before the mid-30s. In both the UK and Dutch research, the adult onset group included offenders of similar ages to those captured in the current study (see Francis et al. 2013; Kleemans & de Poot 2008; van Koppen et al. 2010; van Koppen, de Poot & Blokland 2010).

Limitations aside, these data provide the first opportunity to explore and understand organised criminal offending in Australia. Prior international research encountered similar limitations associated with recorded crime data, but nevertheless provided valuable insight into the crimes committed by organised crime offenders.

Results

Age at first offence

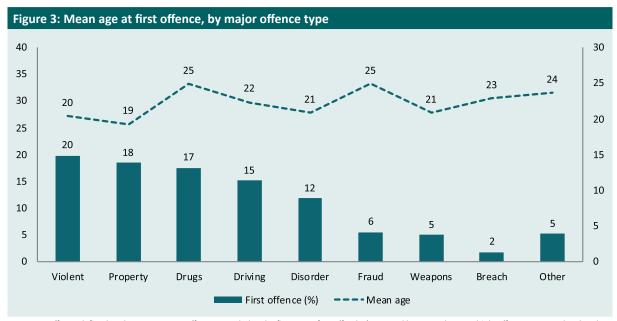
The majority of organised crime offenders committed their first criminal offence, or were first apprehended, as adults. Twenty-five percent (n=535) recorded their first offence before turning 18. Fifty-nine percent (n=1,275) were aged 20 years or over at the time of their first offence, 30 percent (n=656) were aged 25 years or over and 10 percent (n=226) were aged 30 years or over (Figure 2). The average age of first-time offenders was 21.8 years (median=21.0).



Source: AIC organised crime offender criminal histories database, 2017 [computer file]

In the current study, the first offence was defined as the most serious offence recorded in the first year of an offender's criminal history, because information on the date of each offence was limited to the year of the offence. First offences were most commonly violent offences (20%, n=430), followed by property offences (18%, n=400) and drug offences (17%, n=379) (Figure 3). Offenders whose first offence was a violent offence were most often apprehended for a serious assault resulting in injury (34%, n=146) followed by common assault (27%, n=117). Similarly, the most common first property offence was receiving and handling the proceeds of crime (30%, n=120) followed by theft from retail premises (23%, n=94). Forty-three percent (n=164) of those offenders whose first offence was a drug offence were arrested for dealing or trafficking offences, while a further 24 percent were arrested for possession (n=90).

The age profile of first-time offenders varied by offence type. The mean age of first-time offenders whose first offence was a violent or property offence was 20.3 and 19.2 years, respectively. The mean age of first offence for drug and fraud offenders, however, was much higher at 24.9 years. A Kruskal-Wallis test showed a statistically significant association between offence type and the age of first offence ($\chi^2(8)$ =336.7, p<0.001). Post hoc tests revealed that first-time drug and fraud offenders were significantly older than violent and property offenders (z=16.1, p<0.001).



Note: First offence defined as the most serious offence recorded in the first year of an offender's criminal history. Where multiple offences occurred within the same year, offences were ranked by seriousness according to the Australian Bureau of Statistics' National Offence Index (ABS 2011)

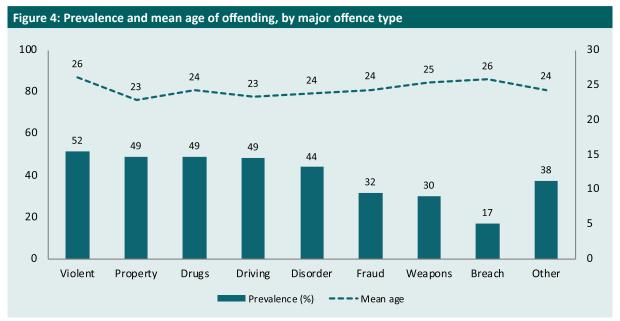
Source: AIC organised crime offender criminal histories database, 2017 [computer file]

Prevalence and incidence of offending

Overall, half of the offenders in the sample had a recorded drug (52%, n=1,121), property (49%, n=1,069), driving (49%, n=1,068) or disorder (49%, n=1,055) offence at some point in their criminal history (Figure 4). Forty-four percent had a violent offence (n=959), while one-third (32%, n=687) had a recorded breach offence, indicating a significant proportion had a history of non-compliance with criminal justice orders. Offences associated with organised criminal activity—weapons offences (30%, n=657) and fraud offences (17%, n=368)—were also common within the sample.

The age at which offenders were apprehended also varied by crime type. The mean age of offenders for each major category of offence ranged from 22.9 years to 26.1 years of age, and the average age for all offences was 24.2 years. The mean age of offending was highest for drug (26.1 years), fraud (25.9 years) and weapons (25.4 years) offences and lowest for property offenders (22.9 years). Again, there was a statistically significant difference between offence types in the age of offenders at each offence ($\chi^2(8)$ =1,067.2, p<0.001).

Estimates of the overall prevalence of offending—the proportion of the sample who committed at least one offence—and the mean age of offenders, disaggregated by offence type, are useful in understanding the offence history of offenders involved in organised crime. However, these estimates do not take into account the fact that offenders in the sample were followed for different periods.



Note: Where an offender recorded multiple offences within the same ANZSOC group in the same year, only one offence was used to calculate the mean age of offenders

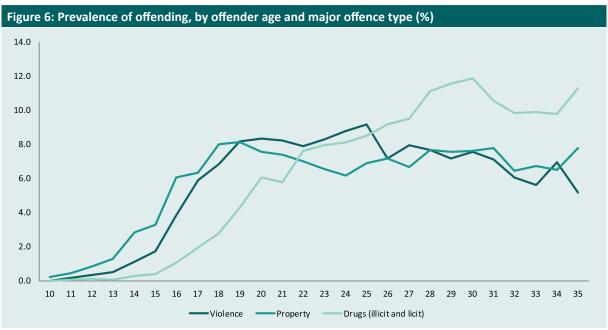
Source: AIC organised crime offender criminal histories database, 2017 [computer file]

Offending was most prevalent (and relatively stable) throughout organised crime offenders' 20s and early to mid-30s (Figure 5). This was based on the total population of offenders observed at each age to account for the variable follow-up period. Offending increased substantially between 15 years (when only 6 percent of the population were active) and 19 years (when 25 percent of the population was active). On average, one-quarter of offenders were active between the ages of 20 and 36 years. The prevalence of offending fell below 25 percent only at age 35. The incidence of offending—the average number of offences per active offender—gradually increased throughout this period, peaking at 5.5 offences per active offender aged 31 years.

The prevalence of offending at each age varied by offence type. Drug offences, for example, were more common than violent or property offences among offenders in their late 20s and beyond (Figure 6). The prevalence of property offending increased sharply during the late teens, with eight percent of offenders committing a property offence at age 19, and remained relatively stable throughout the 20s and 30s. There was a similar trend in violent offending, which increased sharply during the late teens before peaking at age 25 (9%). The prevalence of drug offending increased gradually from the mid-teens and did not peak until age 30 (12%).



Source: AIC organised crime offender criminal histories database, 2017 [computer file]

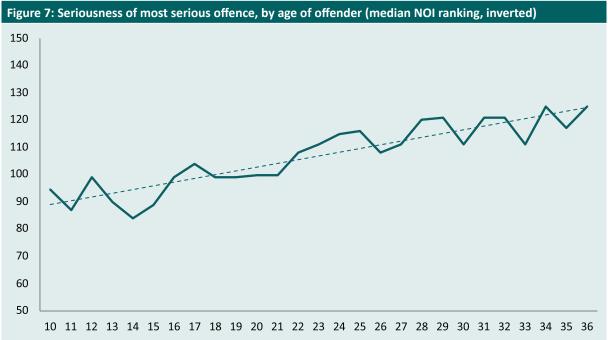


Note: Excludes offending at age 36 due to small numbers

Source: AIC organised crime offender criminal histories database, 2017 [computer file]

Seriousness of offences

Older offenders tended to commit more serious offences. Offence seriousness was measured using the Australian Bureau of Statistics' (2009) National Offence Index (NOI), a ranking of all ANZSOC categories based on their perceived seriousness. The NOI ranking was inverted so that more serious offences received a higher ranking. The most serious offence committed by each offender at each age was identified, and the median NOI ranking for all offenders who offended at each age was then calculated, revealing that the median NOI ranking increased with offender age (Figure 7).



Source: AIC organised crime offender criminal histories database, 2017 [computer file]

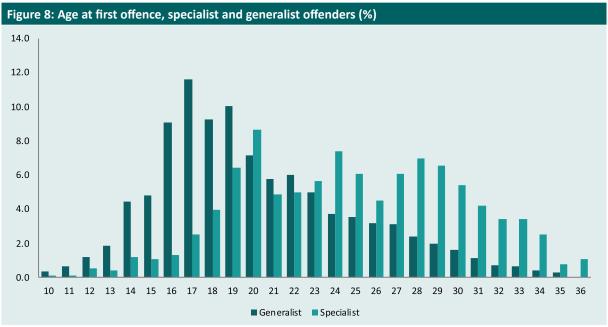
Specialist and generalist offenders

Finally, the majority of this cohort was found to be generalist offenders. There were, however, notable differences between specialist and generalist offenders in both their age at first offence and their prevalence of offending at different ages. Offending specialisation was measured using the same diversity index Francis et al. (2013) used in their study of UK organised crime offenders, and the biascorrection method used by Francis and Humphreys (2016). This score is calculated using the number of offences committed by an offender in each of the nine categories of offences. A score closer to zero indicates greater specialisation, while a score closer to one indicates more diverse offending. As with Francis et al., offenders with a score of 0.4 or below were classified as specialist offenders. The biascorrection method controls for instances where a small number of offences have been committed across the criminal career (Francis & Humphreys 2016).

Thirty-five percent (n=761) of offenders in the sample were classified as specialist offenders. When offenders who had been apprehended for just one offence were excluded, this reduced to 20 percent (n=346). The mean diversity score for specialist offenders was 0.03 (0.06 excluding offenders with only one offence), compared with 0.76 for generalist offenders. The overall mean diversity score was 0.50 (0.62 excluding offenders with only one offence).

An important limitation of this approach is the fact that the more offences an offender has committed, the greater the likelihood that offences will fall in multiple categories. In the current study, offenders who started offending relatively late in life and continued offending beyond the follow-up period would be classified as specialist offenders, when in fact they went on to commit a diverse range of offence types.

Generalist offenders tended to offend for the first time at a younger age (Figure 8). Thirty-five percent (n=476) of generalist offenders committed their first offence before the age of 18, compared with just seven percent (n=59) of specialist offenders. Conversely, 45 percent (n=358) of specialist offenders committed their first offence after the age of 25, compared with 15 percent (n=202) of generalist offenders. The mean age at first offence for specialist and generalist offenders was 24.7 and 20.0, respectively—a statistically significant difference (z=18.9, p<0.001). Similar patterns were observed when offenders who had only one recorded offence were removed from the analysis (z=14.2, p<0.001).



Source: AIC organised crime offender criminal histories database, 2017 [computer file]

Not surprisingly, the prevalence of offending among generalist offenders was also significantly higher than for specialist offenders. The prevalence of offending among generalist offenders increased sharply in adolescence, peaking in the early 20s and remaining relatively stable thereafter. There was a consistent, gradual increase in the prevalence of offending by specialist offenders throughout the observation period, peaking in the early to mid-30s.

Discussion and conclusion

This study represents the first analysis of the criminal histories of Australian organised crime offenders. Similar studies have been conducted in the Netherlands and United Kingdom, but the organised crime offenders in those studies were identified on the basis of their recorded offending. The current study combined intelligence holdings with recorded crime data to produce a more complete picture of the criminal histories of individuals known to be affiliated with organised crime groups.

This study is largely descriptive in nature; however, it is possible to draw several important conclusions. The overwhelming majority of offenders associated with an organised crime group were male. The average age of first-time offending was 22 years and the majority of individuals associated with organised crime groups committed their first criminal offence—or were first apprehended—as adults. This finding aligns with international organised crime studies (see Francis et al. 2013; Kleemans & de Poot 2008; van Koppen et al. 2010; van Koppen, de Poot & Blokland 2010), and reinforces the different age profiles of organised crime offenders and volume crime offenders (see Moffitt 1993; Weatherburn, Freeman & Holmes 2014).

Literature suggests this difference may be the result of the types of crimes organised offenders commit. Offences traditionally associated with organised crime include drug trafficking, fraud, weapons offences, and other crimes more sophisticated and complex than volume crimes. The knowledge and skills needed to commit such crimes may only come with life experience (see Kleemans & de Poot 2008). Alternatively, social opportunity theory suggests organised crimes may rely more on efficient criminal networks, which require a high degree of trust and collaboration (see Kleemans 2014). This level of trust may take years to establish and may therefore contribute to the older age of onset among this cohort.

The cohort of organised crime offenders showed a level of persistence in offending from the age of 20 that is not characteristic of volume crime samples (see Weatherburn, Freeman & Holmes 2014). Not all offenders were active in each year they were observed, but nearly one-third of offenders were active at any given age. Further, the frequency of offending gradually increased with age, as did the seriousness of the offending. This may reflect their growing involvement in organised crime activity, and the effect of increased surveillance and detection by law enforcement. Future research could examine how seriousness of offending varies at an individual level, and between groups of offenders, to better understand this escalation over time.

Age profiles of offenders, including their age at first offence and the prevalence of offending at each age, varied by offence type. Offenders who committed a drug or fraud offence as their first offence, for example, were significantly older than offenders who committed volume offences. Offenders who committed a drug, fraud or weapon offence were also older than those who committed other offence types; for example, those who committed drug offences tended to be older than those who committed either violent or property offences.

This may partly be a function of the nature or sophistication of each crime type. Some crimes require a specific level of prior knowledge, skill or opportunity that may not be available to younger offenders (Kleemans & de Poot 2008; Levi 2014). Fraud, for example, may require prior knowledge of financial systems and processes, which takes time to acquire. Similarly, a significant proportion of the drug offences committed by organised crime offenders were distribution offences, which require the formation of trusted networks that can only develop over time. An important avenue for further research to more thoroughly examine is the relationship between the age of onset, type of first offence and subsequent organised criminal career. This would provide a greater understanding of the pathways into organised crime offending.

Finally, the majority of organised crime offenders were found to be generalists, as opposed to specialist offenders, meaning they tended to have committed different offence types throughout their criminal career. Only around a third of organised crime offenders could be classified as specialists and, when limited to offenders with multiple offences, this proportion declined to around a fifth. This may be a consequence of the limited criminal history data available for older offenders, including those who started offending later in life. However, international research has produced similar findings. Francis et al. (2013), for example, concluded that 12 percent of UK organised crime offenders showed evidence of specialisation—a smaller proportion than in the current study. It is widely accepted that specialised offenders or facilitators exist within organised crime groups (ACIC 2017; Albanese 2000; National Crime Agency 2016; van Koppen, de Poot & Blokland 2010; Zhang & Chin 2002), but a growing body of empirical research now shows that the majority of offenders who engage in organised crime are not specialists.

There were limitations with the data sources used for the current study, and limitations associated with using recorded crime data more generally, which need to be acknowledged. Nevertheless, these results provide new insights into the offending pathways of a seriously under-researched cohort of offenders. Further research will examine certain aspects of these pathways, drawing on international research, including identifying and understanding different groups of offenders within the data and examining certain types of offenders in more detail.

Disrupting and preventing serious and organised crime is a challenging but vital goal for government and law enforcement. Combating this pervasive issue requires harnessing the combined knowledge and skills of research, law enforcement and intelligence. Only a multifaceted approach will address the current knowledge gap while also supporting the development of innovative, evidence-led approaches to respond to organised crime in Australia.

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