

#### **Australian Institute of Criminology**

## Trends & issues in crime and criminal justice

#### No. 637 September 2021

**Abstract** | A growing number of international studies have shown members of organised crime groups have different criminal career trajectories to volume crime offenders.

This study analysed the recorded criminal histories of a sample of 3,007 individuals affiliated with known organised crime groups. Trajectory analysis revealed four distinct offending trajectories, differentiated by their onset, peak and frequency of offending. Consistent with overseas studies, there was a large group of late-onset offenders. Groups also differed in offending versatility, seriousness and escalation.

Further analysis, including of offence types, revealed that individuals varied in their criminal careers prior to their involvement in organised crime offending, indicative of the different recruitment pathways that exist.

# Organised crime and criminal careers: Findings from an Australian sample

Anthony Morgan and Jason Payne

Recent research examined, for the first time, the criminal histories of Australian organised crime group members (Fuller, Morgan & Brown 2019; Morgan, Brown & Fuller 2018). This research showed that many organised crime group members did not start offending until well into adulthood and that, as a cohort, they were prolific, persistent and versatile in their offending, with older offenders committing more serious crimes and offending more frequently. However, this analysis masked individual differences by focusing on average offending across the cohort, limiting the usefulness of the results in revealing the pathways into and opportunity structures underpinning involvement in organised crime.

A growing body of international evidence has shown that members of organised crime groups have characteristic onset, prevalence and persistence of offending behaviour (Francis et al. 2013; Kleemans & van Koppen 2020; van Koppen, de Poot & Blokland 2010). But it has also shown considerable variation between individuals, challenging commonly-held perceptions of the average organised crime group member (Francis et al. 2013; van Koppen, de Poot & Blokland 2010). Exploring the different trajectories is important in understanding recruitment pathways into organised crime, and in developing effective prevention and disruption measures.



In this study we examine the career trajectories of individuals affiliated with Australian organised crime groups. Given the significant involvement of Australian organised crime groups in the illicit drug trade (Australian Criminal Intelligence Commission (ACIC) 2017; Hughes, Chalmers & Bright 2020; United Nations Office on Drugs and Crime 2019), we include results for a sub-sample of offenders who had been proceeded against for illicit drug supply offences. Importantly, this study provides a unique perspective by using a sample of individuals suspected of being involved in organised crime, identified through law enforcement intelligence, rather than those with a recorded history of organised crime-type offending. Specifically, the sample used in this study is likely more representative of the range of individuals involved in organised criminal activity than a sample of those arrested, charged or convicted for organised crime offences. This is especially relevant given the limitations of officially recorded criminal histories in capturing involvement in organised crime.

#### **Criminal careers research**

Early work illustrating how crime and antisocial behaviour vary over the life course led to the identification of the age—crime curve, demonstrating how criminal involvement typically emerges in adolescence before rapidly declining in early adulthood (Farrington 1986). The work of scholars such as Moffitt (1993), who distinguished between adolescent-limited and life course persistent offenders, led to a proliferation of studies attempting to distinguish different offending trajectories, with important implications for understanding how individuals become involved, and then stay involved, in criminal activity.

There is now an extensive body of criminal careers research that has explored the developmental trajectories of offenders, including the onset, prevalence and frequency of offending; offence specialisation; risk and protective factors for offending; and desistance from crime (Blumstein et al. 1986; DeLisi & Piquero 2011; Jennings & Reingle 2012; Piquero, Farrington & Blumstein 2003). This research has shown that:

- multiple offending trajectories have been observed—usually between three and five groups differentiated by the onset, frequency and persistence of offending;
- most offenders are generalist offenders, committing a wide range of offence types over the course of their career; and
- adult-onset offenders account for around half of officially recorded offender samples, and commit fewer and less serious crimes than adolescent-onset offenders (DeLisi & Piquero 2011; Jennings & Reingle 2012; McGee & Farrington 2010).

Australian research has produced findings consistent with studies conducted overseas, highlighting the important role of early childhood influences (Hemphill et al. 2015; Stewart et al. 2015), differences according to gender and ethnicity (Broidy et al. 2015), and the relatively low-level offences committed by adult-onset offenders (Thompson et al. 2014).

Australian and overseas research has relied on the analysis of large longitudinal datasets, and has focused primarily on younger offenders, high-volume crime and the individual characteristics of offenders. Until relatively recently, administrative data on certain offenders, including those involved in organised criminal activity, has been difficult to access. As a result, the career trajectories of offenders involved in certain crime types, such as organised crime, have not received the same attention (DeLisi & Piquero 2011). This is particularly true among Australian studies.

#### Criminal careers of individuals involved in organised crime

International studies have explored the career trajectories of organised crime group members, including in the Netherlands (Kleemans & de Poot 2008; van Koppen et al. 2010), the United Kingdom (Francis et al. 2013) and Italy (Campedelli et al. 2021). There is also research focused specifically on outlaw motorcycle gangs (Blokland et al. 2017; Pederson 2018), which are increasingly recognised as being involved in organised criminal activity in countries where they are active.

Collectively, this research has highlighted that findings from life-course criminology derived from studies of volume crime offenders are not directly transferable to studies of organised crime groups. These studies have consistently found a much larger share of organised crime group members who follow an adult-onset trajectory, characterised by a profile of more serious offending (Kleemans & van Koppen 2020).

But, importantly, other trajectories exist, indicating the potential that different involvement mechanisms are at play. These trajectories can provide insights into the processes likely involved in recruitment into organised crime (Calderoni et al. 2020). Involvement in organised crime offending at an early age might be a consequence of the familial or peer networks that draw individuals into groups during adolescence and emerging adulthood (van Koppen 2013), while individuals with prolific offending, including violent crime, early in their careers might be recruited into organised crime groups because of their criminal propensity, expertise or networks (Kleemans & van Koppen 2020). It has been argued that later onset offending—common in organised crime samples—reflects social opportunity structures and the social, economic and professional requirements of organised crime groups, which are present later in life (van Koppen 2013). Indeed, contrary to evidence that shows employment usually reduces the likelihood of involvement in crime, recent research has shown that employment and owning a business are associated with higher rates of offending within organised crime samples (van Koppen et al. 2020).

How this applies to Australian organised crime group members is relatively unknown. Certainly, Australia faces many of the same organised crime threats as countries where these studies have been conducted, although the problems associated with organised crime experienced in Australia are moderate in comparison (Ayling & Broadhurst 2014). At the same time, Australia has its own unique history of organised crime. The profile of organised crime groups varies between states and territories, reflecting different demographics, consumer demand and other pull factors (Dowling & Morgan 2021). These groups have also changed over time, shifting away from hierarchical groups organised around ethnicity or activity to smaller, more flexible groups that target multiple markets and are more entrepreneurial (Ayling & Broadhurst 2014; Hughes, Chalmers & Bright 2020), though there are exceptions (Morgan et al. 2021; Sergi 2017). Trade in physical commodities, particularly illicit drugs, continues to dominate the Australian organised crime landscape (Hughes, Chalmers & Bright 2020; Morgan et al. 2021). Further, the response to organised crime is different in Australia and in those jurisdictions where criminal career research has been conducted, including the Netherlands and Italy (Ayling 2014; Sergi 2017). There is a strong case to be made for developing local evidence on recruitment pathways into organised crime, including pathways into the supply of illicit drugs.

#### Method

#### **Research questions**

This paper aims to identify different trajectories of recorded offending within a sample of Australian organised crime group members and, in doing so, address the following research questions:

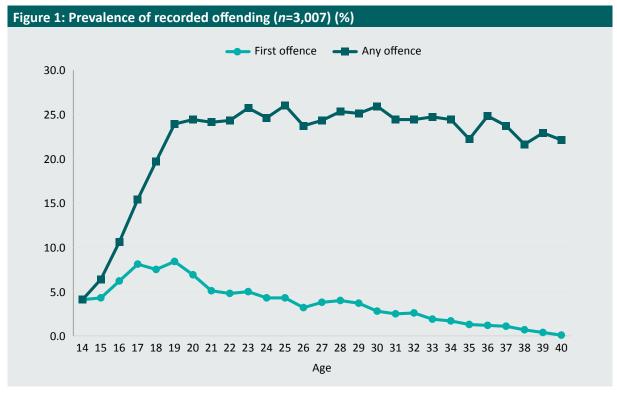
- How do these trajectories differ from one another in the onset, prevalence, frequency and seriousness of offences committed?
- Are some offender types more likely to follow certain trajectories than others?
- What are the pathways into organised crime-type offences?

#### Sample

The current study examines the criminal histories of individuals identified as being affiliated with an organised crime group, as defined by the Australian Criminal Intelligence Commission. While many definitions of organised crime are available (von Lampe 2021), we rely on the broad definition in the *Australian Crime Commission Act 2002* (Cth), largely for pragmatic reasons (the data used for this study is from the ACIC, formerly the Australian Crime Commission). This Act describes serious and organised crime as an offence that typically involves two or more offenders, substantial planning and organisation, and sophisticated methods and techniques, or one of several specified offences.

The study uses the same data source as the earlier study by Fuller, Morgan and Brown (2019). This sample was created by matching records from two ACIC intelligence databases: the National Criminal Target List (NCTL) and the National Police Reference System (NPRS). The NCTL holds information on active and nationally significant serious and organised crime targets that have been reported to the ACIC by law enforcement partners as operating in or affecting Australia. The NPRS holds information designed to assist operational police, including the criminal histories of offenders. Records were matched between the two databases using names and dates of birth. The sample was limited to only those individuals with a recorded offence in the NPRS.

In the current study, offending is observed up to the age of 40. This is a longer observation period than the earlier study by Fuller, Morgan and Brown (2019). Because of the limits of historical data, individuals were observed only from age 14 onwards. The final sample comprised 3,007 offenders who, collectively, had been apprehended for 56,045 offences from age 14. Around one-quarter of these offenders (23%) had been proceeded against for their first offence before turning 18 (Figure 1). The prevalence of offending was relatively stable from age 19.



#### **Analysis**

Consistent with recent international organised crime studies, and broader criminal careers research, group-based trajectory modelling (GBTM; see Nagin 2005) was used to identify the different offending trajectories that existed within this sample of organised crime group members with at least one recorded offence. This was performed using the Stata plugin developed by Jones and Nagin (2013). GBTM is an iterative process, whereby the number of trajectory groups (between two and five) and the functional form of each trajectory (linear, quadratic and cubic) is tested as a series of nested models. A quadratic zero-inflation parameter was used to account for intermittency in offending. This is appropriate for analysing longitudinal count data (eg arrests by age) with many zero counts (eg no arrests in a given year).

The model that best fit the data was determined using the Bayesian information criterion (BIC), the average posterior probabilities of group membership, and the odds of correct classification for each group. The aim was to identify the model that produced the BIC closest to zero, relative to other models, and an average probability of group membership that was as close to 100 percent as possible. Three, four and five group models were compared. While this is consistent with the methods used in most other studies, we attempted to specify models with more than five groups but were unable to obtain a model that fit the data.

Parameter estimates for the final model are presented in Table 1. The model that was assessed to be the best fit for the data had four groups, each following a cubic form. The average posterior probability of group membership for individuals classified into each trajectory group easily exceeded the recommended threshold of 70 percent (Nagin 2005), while the odds of correct classification for each group exceeded the recommended threshold of 5.0. The four-group model also provided the optimal discrimination between groups and was consistent (at least in the general shape of the trajectories) with both the dominant theory underpinning organised crime involvement and the developing empirical research (see Kleemans & van Koppen 2020).

Table 1: Parameter estimates for final trajectory model								
	Standard estimate	р	Probability of group membership (95% CI)	осс				
Late-onset (45%)								
Intercept	-2.90	<0.001	0.94 (0.93–0.95)	19.42				
Linear	0.38	<0.001						
Quadratic	-0.02	< 0.001						
Cubic	0.00	<0.001						
Low-rate, persistent (35%)								
Intercept	-0.04	0.66	0.90 (0.89-0.90)	15.99				
Linear	0.22	< 0.001						
Quadratic	-0.01	<0.001						
Cubic	0.00	<0.001						
Early onset, moderate (15%)								
Intercept	1.32	< 0.001	0.90 (0.89-0.92)	56.47				
Linear	0.11	<0.001						
Quadratic	-0.01	< 0.001						
Cubic	0.00	< 0.001						
Early onset, prolific (5%)								
Intercept	2.32	<0.001	0.95 (0.93-0.97)	395.12				
Linear	0.03	< 0.05						
Quadratic	0.00	0.52						
Cubic	0.00	<0.001						
Model specifications								
n	3,007							
Bayesian information criterion	-66,921.12							

Note: Group membership is based on the sum of weighted posterior probabilities for individuals. For subsequent analysis, individuals in the database are classified as belonging to a trajectory group based on their maximum posterior probability of group membership. This explains the small difference between the percentages of individuals in each group. Cl=confidence interval; OCC=odds of correct classification

Source: AIC organised crime offender criminal histories database, 2019 [computer file]

To conduct further analysis on these groups, individuals were classified as belonging to one of the trajectory groups based on the maximum posterior probability of group membership (ie the group to which they had the highest probability of belonging). Several dimensions of criminal offending were then examined for each group, including:

- the types of offences committed by each group;
- the degree of specialisation; and
- offence seriousness.

Subsequent analysis of these four groups explored specific pathways into the supply of illicit drugs and ongoing criminal enterprise (OCE) offending. OCE includes blackmail and extortion, the commercial supply of drugs and firearms, serious fraudulent activity and serious regulatory offences (eg bribery of government officials and import and export regulation offences). Consistent with Morgan, Dowling and Voce (2020), OCE is used here as a proxy for organised crime-type offending, as it best reflects the range of offences that meet the definition of serious and organised crime used in the *Australian Crime Commission Act 2002* (Cth)—specifically, offences requiring a high degree of planning, organisation and sophistication.

#### Limitations

The limitations of using recorded crime data to examine the criminal histories of individuals involved in organised crime were described by Fuller, Morgan and Brown (2019). They include that the analysis is necessarily limited to the individuals, and offences, that have been detected by law enforcement and against which legal action has been taken. Further, because of the absence of national custodial data, it was not possible to account for the time spent in custody. These periods may be significant given the seriousness of offences committed by the sample. Researchers have acknowledged the importance of accounting for time in custody, particularly in relation to desistance (Piquero, Farrington & Blumstein 2003), although Australian research suggests it may have a modest effect on recidivism rates, including for more serious offences (Ferrante, Loh & Maller 2010; Harding & Maller 1997). Importantly, this does not affect our findings with respect to the large proportion of late-onset offenders, which is characteristic of organised crime samples. Further, given our sample pertains to a list of current members of organised crime groups, we do not draw any conclusions with respect to desistance.

Database time constraints are particularly relevant to a study of criminal careers. The analysis is limited to offending up to the age of 40 due to the limits of historical data. Older offenders are therefore excluded from the analysis. Although this limitation is not unique to this study (see Francis et al. 2013; Kleemans & de Poot 2008; van Koppen, de Poot & Blokland 2010; van Koppen et al. 2010), the trajectories are not likely to be fully representative of older members of organised crime groups.

Given the well-established pattern of late-onset offending among individuals involved in organised crime (Kleemans & van Koppen 2020), and the need to observe individuals in our sample for as long as possible, we restricted the observation period to ages 14 to 40 (inclusive). Results from the earlier study by Fuller, Morgan and Brown (2019), which analysed criminal histories from 10 years old—the age of criminal responsibility in Australia—suggest this impacts no more than three percent of offenders who had contact with police before the age of 14, many of whom are likely to be identified as early-onset offenders by virtue of other offences recorded in their teens. Only two percent of offenders in our sample with full criminal history available (ie offences from age 10) had a recorded offence before the age of 14 and, of these, almost 90 percent offended between ages 14 and 17. It is therefore unlikely this had a significant impact on the trajectory groups identified in the GBTM.

International research has often relied on identifying organised crime members based on their criminal histories and commission of specific types of offences rather than known group affiliation. The current sample includes individuals who are identified as organised crime affiliates based on law enforcement intelligence—broader inclusion criteria that might provide important new insights, particularly among those not yet apprehended for an organised crime-type offence. Of course, it is possible that individuals in our sample had been apprehended for offences related to organised crime that did not fall within our definition of organised crime-type offences (ie OCE). Violent crime, for example, is not included among OCE offences but is a feature of organised crime offending (ACIC 2017). We focus on OCE offences because we were not able to establish co-offending using the current data. Nor is there any standard classification of organised crime offences in officially recorded crime (in the data used in this study or any other Australian data that we are aware of). Organised crime is harder to measure at the level of specific acts—the degree of organisation likely protects many members from apprehension and prosecution. To rely on offences to identify offenders, especially when an alternative exists based on high-quality intelligence, would be counterproductive. Intelligence assessments that draw upon a wider range of information than recorded criminal histories are, in this context at least, likely a better measure of organised crime involvement than the presence or absence of an OCE offence.

Criticisms of this approach include that it may overestimate people's involvement in organised crime. We note that the specific detail of each individual's involvement in the organised criminal activities of the group in which they were a member, or their status in the group, was not known. Importantly, the data custodians (ACIC) had processes in place to ensure the assessments provided by law enforcement agencies supported the threat and impact ratings applied to targets on the NCTL. While responsibility for quality assurance of the intelligence rested with the agency submitting the target to ACIC, there were clear processes in place for ensuring that targets met the eligibility criteria for inclusion on the NCTL and, in particular, the degree to which each group had a real or potential impact on the Australian community. Further, the focus of the NCTL was at the group level, rather than on individuals. This mitigates the risk of bias in decisions to add individuals to the NCTL, though not entirely.

Finally, it should be acknowledged that GBTM provides a mechanism for describing complex criminal careers in a relatively simple way and, in doing so, assigns individuals to groups assuming all members of these groups follow the same exact trajectory. However, it is important to realise that individuals do not, in fact, belong to these groups, nor do they exactly follow the trajectories described in this paper—these groups do not really exist (Nagin & Tremblay 2005). Instead, these groups and trajectories represent a mechanism for identifying common features or pathways that can provide insights into the underlying drivers of organised crime involvement, continuation and desistance.

#### **Results**

### How do these trajectories differ from one another in the onset, prevalence, frequency and seriousness of offences committed?

Results from the GBTM are presented in Figure 2. Trajectory analysis revealed four distinct offending trajectories, differentiated by their onset, peak and frequency of offending. There was a small group of offenders, representing just five percent of all offenders, who started offending relatively early—aged 18.7 years on average—and went on to become very prolific. They averaged nearly 100 offences (98.4) each, more than twice as many as the next most prolific group. Recorded offending among members of this group peaked at around age 26.

There was a larger group of moderately prolific offenders, who also had their first recorded offence in their late teens (19.2 years on average), but who were less prolific than the first group. They committed an average of 44.5 recorded offences each. There was some evidence of an increase in offending frequency in their late 30s. One in three offenders (35%) offended at a lower rate than the moderate and prolific groups, averaging 18.0 offences each, and continued to offend at low levels until the end of the observation period. The average age of onset for this group was 20.2, while offending peaked at age 29.

Finally, there was a large group—almost half of all offenders (45%)—with a very low number of recorded offences who also started offending relatively late. The average age of the first recorded offence for members of this late-onset group was 26.3 years, and they averaged 2.9 offences each over the entire observation period.



Note: Group membership in this figure is based on the sum of weighted posterior probabilities for individuals. For subsequent analysis, individuals in the database are classified as belonging to a trajectory group based on their maximum posterior probability of group membership. This explains the small difference in the percentages of individuals in each group between Figure 1 and Tables 2–4

Characteristics of these trajectory groups are summarised in Table 2. Although males accounted for the overwhelming majority of offenders in the sample (93%), there was a significant relationship between gender and group membership ( $\chi^2(3)=9.76$ , p<0.05). Inspection of the standardised adjusted residuals indicated that females were less likely to belong to the low-rate group and more likely to belong to the late-onset group. There was also a significant association between outlaw motorcycle gang (OMCG) membership and group membership ( $\chi^2(3)=32.49$ , p<0.001). OMCG members were less likely to belong to the late-onset group and significantly more likely to belong to the moderate or prolific groups.

Two other criminal career dimensions were examined. First, the versatility of offending was measured using the diversity index (Francis et al. 2013; Fuller, Morgan & Brown 2019), and the bias-correction method was used to control for cases with a small number of offences (Francis & Humphreys 2016). A score closer to zero indicates greater specialisation, while a score closer to one indicates more diverse offending. Offenders with a score of 0.4 or below were classified as specialist offenders. Outside of the late-onset group, of which 40 percent were classified as specialist offenders, offence specialisation was rare. Four percent of the moderate offending group, seven percent of the prolific offending group and nine percent of the low-rate offending group showed evidence of specialisation (and all averaged similar scores on the diversity index). Overall, 19 percent of offenders in the sample were specialist offenders; in other words, the vast majority were generalist offenders.

The seriousness of offending was also examined. In the earlier study by Fuller, Morgan and Brown (2019), offenders were found to commit more serious offences at older ages. But it was unclear whether the seriousness of offending by individual offenders escalated as they aged, or whether the results were driven by later onset offenders being first apprehended for more serious offences. Offence seriousness was measured using a modified version of the Western Australian Crime Harm Index (WACHI; House & Neyroud 2018; see Morgan, Dowling & Voce 2020 for details of modifications). The mean offence seriousness was highest for the late-onset group and lowest for the prolific group. This means that, on average, although they commit fewer offences, the offences that were committed by the late-onset group tended to be more serious. The low-rate offending group had the second highest offence seriousness.

Escalation in offence seriousness was based on the coefficient of a linear regression of the total combined harm index in any given year, using the order of offences committed by each person. This approach is similar to the approach adopted by Campedelli et al. (2021) in their analysis of mafia offenders. The median coefficient for each group (used in lieu of the mean because of the wide range of values) is reported in Table 2. Overall, only the low-rate and moderate groups showed evidence of escalation (indicated by a median coefficient greater than 0).

Table 2: Characteristics of members of Australian organised crime groups with a recorded offence history, by trajectory group (n=3.007)

instory, by trajectory group (n=3,007)								
	Late-onset (46%)	Low-rate (35%)	Moderate (14%)	Prolific (5%)	All offenders			
Gender <sup>a</sup>								
Male ( <i>n</i> =2,765)	46	36	14	5	_			
Female ( <i>n</i> =193)	56	27	14	3	_			
OMCG membership <sup>b</sup>								
OMCG member (n=312)	33	39	19	9	_			
Other organised crime group member ( <i>n</i> =2,695)	48	34	13	4	-			
Onset and frequency								
Mean age of first offence <sup>c</sup>	26.3	20.1	19.2	18.7	22.8			
Mean offences	2.9	18.0	44.5	98.4	18.5			
Versatility								
Specialist offenders (%) <sup>d</sup>	40	9	4	7	19			
Mean diversity index (SD)	0.5	0.7	0.7	0.7	0.6			
Seriousness <sup>e</sup>								
Mean offence seriousness (WACHI)	93.4	69.0	57.4	42.4	60.1			
Escalation (median coefficient)	0.0	1.5	3.9	0.0	0.0			
Total (n)	1,393	1,050	420	144	3,007			

Note: OMCG=outlaw motorcycle gang; WACHI=Western Australian Crime Harm Index

Source: AIC organised crime offender criminal histories database, 2019 [computer file]

a: Row totals. Excludes 49 people with missing data. Relationship between gender and trajectory group was statistically significant ( $\chi^2(3)=9.76$ , p<0.05)

b: Row totals. Relationship between OMCG membership and trajectory group was statistically significant ( $\chi^2(3)=32.49$ , p<0.001)

c: Age of first offence from 14 years and over

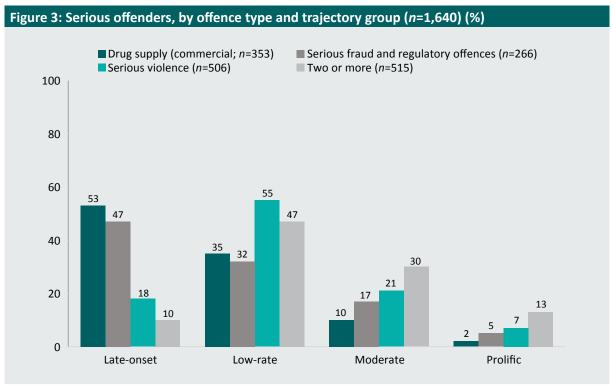
d: Limited to offenders with at least two recorded offences

e: Offence seriousness measured using a modified version of the Western Australian Crime Harm Index (House & Neyroud 2018). See Morgan, Dowling and Voce (2020) for details of modifications

#### Are some offenders more likely to follow certain trajectories than others?

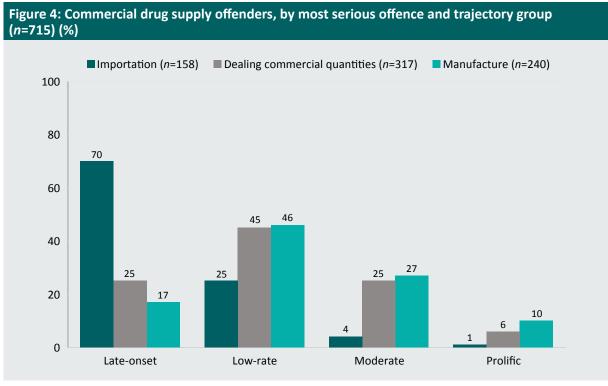
So far, this paper has examined patterns of recorded offending overall, without distinguishing between individuals who committed different types of offences. The analysis that follows explores the distribution of offence types across the four trajectory groups.

In Figure 3, offenders are categorised according to four broad, mutually exclusive categories of serious offences for which they have been the subject of legal action: commercial drug supply (22%), serious violence (31%), serious fraud and regulatory offences (16%) or two or more of these categories (31%). Around half of the sample (55%) had been the subject of legal action for at least one of these offence types. Results show that late-onset offenders accounted for half of all offenders with commercial drug supply (53%) and serious fraud and regulatory offences (47%), while low-rate offenders accounted for half of offenders with serious violence offences (55%). Offenders with more than one of these categories of offences were most likely to be low-rate offenders (47%) but, unsurprisingly, were more likely than offenders with only one of these offence types to be in the moderate (30%) or prolific (13%) offender groups.



Source: AIC organised crime offender criminal histories database, 2019 [computer file]

Further analysis of commercial drug supply offenders, categorised according to their most serious drug offence, revealed that the majority of offenders apprehended for an importation offence (70%) were late-onset offenders (Figure 4). Low-rate offenders accounted for around half of all offenders apprehended for a manufacturing (46%) and commercial dealing (45%) offence. Overall, nearly three-quarters (73%) of all commercial drug supply offenders were in the two lower rate offending groups.



Source: AIC organised crime offender criminal histories database, 2019 [computer file]

#### What are the pathways into organised crime-type offences?

Forty percent of offenders in the sample (n=1,197) had been apprehended for at least one organised crime-type offence, meaning an offence that falls within the definition of OCE used in this paper. While all of the offenders had been added to the NCTL because of their suspected involvement in organised criminal activity, exploring the histories of those offenders apprehended for OCE can provide insights into the pathways into known organised criminal activity, because for these individuals we can identify an index OCE offence (the first recorded OCE offence). Figure 5 presents the mean age of the first OCE offence, and the mean number of prior offences (defined as offences that occurred in years prior to the first OCE offence), for each trajectory group and offenders overall. Unsurprisingly, there are clear differences in the four cohorts for both metrics. The more prolific an offender's criminal history overall, the higher the mean number of prior non-OCE offences, and the higher the mean age of their first OCE offence.

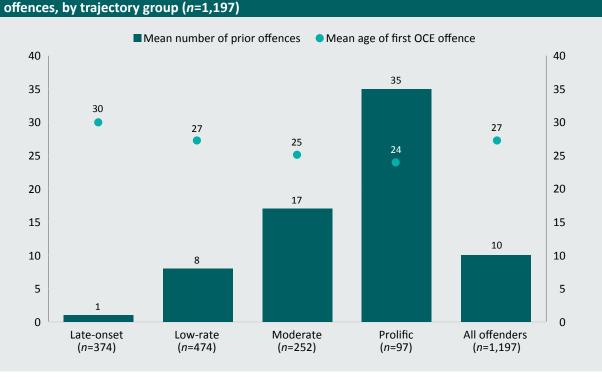


Figure 5: Mean age of first ongoing criminal enterprise (OCE) offence, and mean number of prior offences, by trajectory group (n=1,197)

Finally, we examined the prior criminal history of offenders apprehended for a commercial drug supply offence. The aim was to determine the extent of involvement in other offending, including less serious drug offending, prior to their first commercial drug supply offence. This is especially important given not only the dominant role of illicit drugs in the Australian organised crime landscape but also the frequent contact between people who consume drugs or who engage in non-commercial drug supply and the criminal justice system.

There was little difference between offenders in the low-rate, moderate and prolific groups in terms of whether they had been apprehended for a prior offence before their first commercial drug supply offence. The majority, around four in five, had at least one prior recorded offence (Figure 6). Similar rates of a prior or concurrent drug offence—specifically, a drug possession or use offence or non-commercial supply—were found among the moderate and prolific groups, while the prevalence of a prior or concurrent drug offence was less common among the low-rate group (62%). Overall, the majority of offenders in all three groups had been proceeded against for a less serious drug offence, including non-commercial supply, possession or use, prior to or in the same year as the commercial drug supply offence, indicating initial involvement in drug markets as either a low-level supplier, buyer or consumer. Prior offending (31%), and having a prior or concurrent drug offence (20%), was much less common among offenders in the late-onset group, as were prior or concurrent possession or use offences (15%). For most of the late-onset offenders with a commercial drug supply offence, this offence represented their first recorded contact with the criminal justice system.

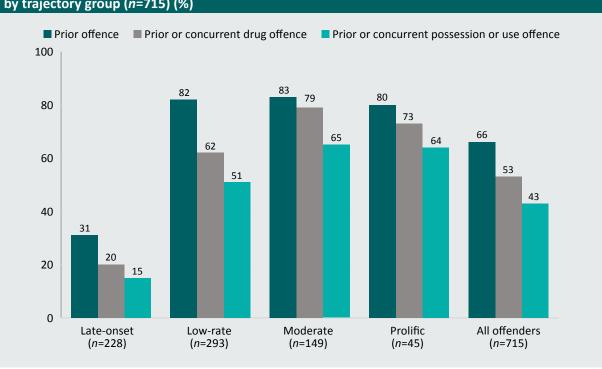


Figure 6: Prior offending history of offenders apprehended for a commercial drug supply offence, by trajectory group (n=715) (%)

#### **Discussion**

This paper is an important first step towards building a better understanding of the different pathways into Australian organised crime. The majority of offenders in the sample were adult-onset offenders and the vast majority were male. Trajectory analysis revealed four distinct groups of offenders, differentiated by their age of onset and frequency of offending. There was a small group of chronic offenders who started offending in their late teens and were responsible for a large number of recorded offences. There were two groups of moderate offenders—early peaking offenders who showed some evidence of declining offending in their mid-20s, and a smaller group of later onset, more frequent offenders who showed some signs of escalating offending in their late 30s. Both moderate offending groups showed signs of escalating offence severity over their offending career. The rest of the cohort—almost half—comprised later onset, low-frequency offenders who committed the most serious offences and who were much more likely to be specialist offenders. There are clear similarities between these findings and those of earlier research carried out in the Netherlands (van Koppen et al. 2010) and more recent replications with UK (Francis et al. 2013) and Italian organised crime groups (Campedelli et al. 2021). They also stand in stark contrast with Australian criminal careers research using other samples (eg Stewart et al. 2015).

Little is known about the individuals and groups represented by these trajectory groups, beyond their criminal offending and basic demographic information. We can only speculate as to their pathways into organised crime. Further work is needed to understand the specific factors associated with recruitment. Nevertheless, these findings demonstrate there is heterogeneity in the criminal careers of individuals involved in known organised crime groups, which likely reflects the different pathways and involvement mechanisms in play.

Offenders in the sample who had been apprehended for an OCE offence committed their first organised crime-type offence in their mid-20s, on average. The more prolific an offender was, the younger they were when they came into contact with the criminal justice system for an organised crime-type offence; however, they were also much more experienced in terms of their prior criminal history. For these individuals, recruitment into organised crime was possibly a consequence of organised crime groups being attracted to their relevant criminal skills or social networks, or a function of the opportunities that arise from their contact with other individuals involved in criminal activity (ie self-selection; Calderoni et al. 2020; van Koppen 2013). For offenders in the later onset group(s), the attraction to organised crime is likely to be different. They are older and, relatively speaking, less experienced in criminal activity, which suggests very different mechanisms at play (van Koppen et al. 2010).

Pathways from drug use and low-level supply to involvement in commercial supply, particularly of substances such as methamphetamine (which currently dominates the Australian illicit drug market; Morgan et al. 2021), cannot be ignored. However, a large proportion of offenders proceeded against for commercial drug supply offences, particularly importation offences, did not have a prior recorded history of drug offending or any offending at all. This is true of most offenders in the late-onset group. Similarly, many serious fraud offenders were members of this late-onset group, indicating the significance of situational opportunities for financial crime that are present later in life, such as financial setbacks or the potential to increase profits by switching from legal to illegal activities (Kleemans & de Poot 2008).

These results illustrate the importance of both the targeting and timing of interventions to prevent recruitment into organised crime and disrupt organised criminal activity. However, more needs to be known about each of these cohorts—including the characteristics of individuals in each group and risk factors for their involvement in organised crime—before we can draw conclusions about the types of interventions that will successfully reduce the likelihood of involvement in organised crime.

What is apparent is that, for some offenders, preventing their involvement in criminal offending early in life may help steer them away from a career in organised crime. But, for a large proportion of offenders, there is very little known involvement in crime early in life, meaning that prevention activities will likely have little effect on their behaviour. Instead, their involvement will be influenced by social or professional networks established much later in life, significant life events, personal circumstances, and otherwise serendipitous encounters (Kleemans & van Koppen 2020; Smith 2014; van Koppen 2013). That so many members of Australian organised crime groups have little contact with the criminal justice system prior to their first organised crime-type offence reaffirms the importance of alternative sources of intelligence in detecting individuals recruited into organised criminal activity.

#### **Acknowledgements**

The authors wish to acknowledge the Australian Criminal Intelligence Commission for providing the data used in this study.

#### References

URLs correct as at July 2021

Australian Criminal Intelligence Commission (ACIC) 2017. *Organised crime in Australia 2017*. Canberra: ACIC. https://www.acic.gov.au/publications/unclassified-intelligence-reports/organised-crime-australia-2017

Ayling J 2014. Going Dutch? Comparing approaches to preventing organised crime in Australia and the Netherlands. *European Review of Organised Crime* 1(1): 78–107. https://doi.org/10.2139/ssrn.2247758

Ayling J & Broadhurst R 2014. Organized crime control in Australia and New Zealand. In L Paoli (ed), *The Oxford handbook of organized crime*. Oxford University Press: 612–633. https://doi.org/10.1093/oxfordhb/9780199730445.013.021

Blokland A, van Hout L, van der Leest W & Soudijn M 2017. Not your average biker: Criminal careers of members of Dutch outlaw motorcycle gangs. *Trends in Organized Crime* 22. https://doi.org/10.1007/s12117-017-9303-x

Blumstein A, Cohen J, Roth JA & Visher CA 1986. *Criminal careers and 'career criminals'*. Washington, DC: National Academy Press

Broidy LM et al. 2015. Life course offending pathways across gender and race/ethnicity. *Journal of Developmental and Life Course Criminology* 1: 118–149. https://doi.org/10.1007/s40865-015-0008-z

Calderoni F et al. 2020. Recruitment into organised criminal groups: A systematic review. *Trends & issues in crime and criminal justice* no. 583. Canberra: Australian Institute of Criminology. https://doi.org/10.52922/ti04183

Campedelli GM, Calderoni F, Comunale T & Meneghini C 2021. Life-course criminal trajectories of mafia members. *Crime & Delinquency* 67(1): 111–141. https://doi.org/10.1177/0011128719860834

DeLisi M & Piquero AR 2011. New frontiers in criminal careers research, 2000–2011: A state of-the-art review. *Journal of Criminal Justice* 39: 289–301. https://doi.org/10.1016/j.jcrimjus.2011.05.001

Dowling C & Morgan A 2021. Criminal mobility of outlaw motorcycle gangs in Australia. *Trends & issues in crime and criminal justice* no. 619. Canberra: Australian Institute of Criminology. https://doi.org/10.52922/ti04992

Farrington DP 1986. Age and crime. Crime and Justice 7: 189-250. https://doi.org/10.1086/449114

Ferrante A, Loh N & Maller M 2010. Assessing the impact of 'available street time' and mortality on estimates of recidivism. Technical and background paper series no. 35. Canberra: Australian Institute of Criminology. https://www.aic.gov.au/publications/tbp/tbp35

Francis B & Humphreys L 2016. Investigating the relationship between the diversity index and frequency of offending. *Journal of Developmental and Life-Course Criminology* 2(4): 397–416. https://doi.org/10.1007/s40865-016-0034-5

Francis B, Humphreys L, Kirby S & Soothill K 2013. *Understanding criminal careers in organised crime*. Home Office Research Report no. 74. London: Home Office

Fuller G, Morgan A & Brown R 2019. Criminal histories of Australian organised crime offenders. *Trends & issues in crime and criminal justice* no. 567. https://www.aic.gov.au/publications/tandi/tandi567

Harding RW & Maller RA 1997. An improved methodology for analyzing age-arrest profiles: Application to a Western Australian offender population. *Journal of Quantitative Criminology* 13: 349–372. https://doi.org/10.1007/BF02221046

Hemphill SA, Heerde JA, Herrenkohl TI & Farrington DP 2015. Within-individual versus between-individual predictors of antisocial behaviour: A longitudinal study of young people in Victoria, Australia. *Australian & New Zealand Journal of Criminology* 48(3): 429–445. https://doi.org/10.1177/0004865815589829

House PD & Neyroud PW 2018. Developing a crime harm index for Western Australia: The WACHI. *Cambridge Journal of Evidence-Based Policing* 2(1–2): 70–94. https://doi.org/10.1007/s41887-018-0022-6

Hughes CE, Chalmers J & Bright DA 2020. Exploring interrelationships between high-level drug trafficking and other serious and organised crime: An Australian study. *Global Crime* 21(1): 28–50. https://doi.org/10.1080/17440572.2019.1615895

Jennings WG & Reingle JM 2012. On the number and shape of developmental/life-course violence, aggression, and delinquency trajectories: A state-of-the-art review. *Journal of Criminal Justice* 40(6): 472–489. https://doi.org/10.1016/j.jcrimjus.2012.07.001

Jones BL & Nagin DS 2013. A note on a Stata plugin for estimating group-based trajectory models. *Sociological Methods & Research* 42(4): 608–613. https://doi.org/10.1177/0049124113503141

Kleemans E & de Poot C 2008. Criminal careers in organized crime and social opportunity structure. European Journal of Criminology 5(1): 69–98. https://doi.org/10.1177/1477370807084225

Kleemans E & van Koppen MV 2020. Organized crime and criminal careers. *Crime and Justice* 49: 385–423. https://doi.org/10.1086/707318

McGee TR & Farrington DP 2010. Are there true adult-onset offenders? *British Journal of Criminology* 50: 530–549. https://doi.org/10.1093/bjc/azq008

Moffitt TE 1993. Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review* 100: 674–701. https://doi.org/10.1037/0033-295x.100.4.674

Morgan A, Brown R & Fuller G 2018. What are the taxpayer savings from cancelling the visas of organised crime offenders? Statistical Report no. 8. Canberra: Australian Institute of Criminology. https://www.aic.gov.au/publications/sr/sr8

Morgan A, Brown R, Voce I & Cubitt T 2021. Organised and transnational crime: The impact on Australian Police. In P Birch, M Kennedy & E Kruger (eds), *Australian policing: Critical issues in 21st century police practice*. Oxon: Routledge: 315–331

Morgan A, Dowling C & Voce I 2020. Australian outlaw motorcycle gang involvement in violent and organised crime. *Trends & issues in crime and criminal justice* no. 586. Canberra: Australian Institute of Criminology. https://doi.org/10.52922/ti04282

Nagin DS 2005. Group-based modeling of development. Cambridge: Harvard University Press

Nagin DS & Tremblay RE 2005. Developmental trajectory groups: Fact or a useful statistical fiction? *Criminology* 43(4): 873–904. https://doi.org/10.1111/j.1745-9125.2005.00026.x

Pedersen ML 2018. Do offenders have distinct offending patterns before they join adult gang criminal groups? Analyses of crime specialization and escalation in offence seriousness. *European Journal of Criminology* 15(6): 680–701. https://doi.org/10.1177/1477370817751351

Piquero AR, Farrington DP & Blumstein A 2003. The criminal career paradigm. *Crime & Justice* 30: 359–506. https://doi.org/10.1086/652234

Sergi A 2017. Countering the Australian 'ndrangheta: The criminalisation of mafia behaviour in Australia between national and comparative criminal law. *Australian & New Zealand Journal of Criminology* 50(3): 321–340. https://doi.org/10.1177/0004865816652367

Smith RG 2014. Responding to organised crime through intervention in recruitment pathways. *Trends & issues in crime and criminal justice* no. 473. Canberra: Australian Institute of Criminology. https://www.aic.gov.au/publications/tandi/tandi473

Stewart A, Dennison S, Allard T, Thompson C, Broidy L & Chrzanowski A 2015. Administrative data linkage as a tool for developmental and life-course criminology: The Queensland Linkage Project. *Australian & New Zealand Journal of Criminology* 48(3): 409–428. https://www.doi.org/10.1177/0004865815589830

Thompson C et al. 2014. Examining adult-onset offending: A case for adult cautioning. *Trends & issues in crime and criminal justice* no. 488. Canberra: Australian Institute of Criminology. https://aic.gov.au/publications/tandi/tandi/488

United Nations Office on Drugs and Crime (UNODC) 2019. *Transnational organised crime in Southeast Asia: Evolution, growth and impact*. Bangkok: UNODC

van Koppen MV 2013. Involvement mechanisms for organized crime. *Crime, Law and Social Change* 59: 1–20. https://doi.org/10.1007/s10611-012-9396-8

van Koppen MV, de Poot C & Blokland A 2010. Comparing criminal careers of organized crime offenders and general offenders. *European Journal of Criminology* 7(5): 356–374. https://doi.org/10.1177/1477370810373730

van Koppen MV, de Poot C, Kleemans E & Nieuwbeerta P 2010. Criminal trajectories in organized crime. *British Journal of Criminology* 50(1): 102–123. https://doi.org/10.1093/bjc/azp067

van Koppen MV, van der Geest V, Kleemans E & Kruisbergen E 2020. Employment and crime: A longitudinal follow-up of organized crime offenders. *European Journal of Criminology*. Advance online publication. https://doi.org/10.1177/1477370820941287

von Lampe K 2021. Definitions of organized crime. http://www.organized-crime.de/organizedcrimedefinitions.htm

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General editor, *Trends & issues in crime and criminal justice* series: Dr Rick Brown, Deputy 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

https://doi.org/10.52922/ti78337

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