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Abstract | This study examines the criminal histories of outlaw motorcycle gang (OMCG) members during adolescence and early adulthood to determine whether the profile of young members has changed over time. The recorded offence histories of three cohorts of members—those born between 1979 and 1983, 1984 and 1988, and 1989 and 1993—were compared.

Seventy-eight percent of OMCG members across all three cohorts had at least one recorded offence between the ages of 12 and 24. The majority of offenders did not desist but continued offending at a steady rate into adulthood. The youngest cohort in the study was more likely than the middle and older cohorts to have a criminal history and follow a high-rate offending trajectory. Members of the youngest cohort were also more likely to have been apprehended for violence and intimidation, weapons and ongoing criminal enterprise offences by their early twenties.

These results suggest that OMCGs are recruiting younger members, who are becoming involved in gang-related offending earlier in life, or that individuals with a history of offending are becoming more likely to join or be recruited into OMCGs.

Early-career offending trajectories among outlaw motorcycle gang members

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Introduction

Outlaw motorcycle gangs (OMCGs) are one of the most high-profile manifestations of organised crime, with international connections and an active presence in all Australian states and territories (Parliamentary Joint Committee on the Australian Crime Commission 2009). These gangs attract individuals with a propensity for criminal activity by providing a subculture that embraces violent and antisocial behaviour and access to profitable criminal opportunities (Harris 2016; Kleemans & de Poot 2008; Quinn & Forsyth 2009; Quinn & Koch 2003). Once recruited, members also show a marked increase in offending (Blokland et al. 2019; Klement 2016). Australian and international research into the offending of OMCG members suggests that 70 to 90 percent have recorded criminal histories (Blokland et al. 2019; Klement 2016; Morgan, Brown & Fuller 2018; Morgan, Dowling & Voce 2020; Tremblay et al. 1989). However, there is significant variation among members, chapters and gangs in the extent and types of crime they perpetrate.

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The literature has long acknowledged the diversity of OMCGs in relation to their criminality, viewing these gangs as sitting on a continuum (Barker 2007; Quinn & Koch 2003; Wolf 1991). OMCGs have traditionally been clubs for rebellious, predominately working-class men who come together to ride motorcycles, consume alcohol and brawl (Barker & Human 2009; Quinn & Forsyth 2009; Quinn & Koch 2003). While lower-level violent, acquisitive and public order offences have historically characterised many OMCGs, the emphasis of these groups has been less on crime and more on a broader rejection of society's values, and the freedom of a shared outlaw lifestyle. However, at the other end of the spectrum are those OMCGs that have more recently come to operate as sophisticated, cohesive and profit-motivated criminal organisations. A recent study by Morgan, Dowling and Voce (2020) used national Australian data on the criminal histories of 5,669 known OMCG members from 39 gangs, and identified 29 percent of the gangs as criminal organisations based upon the extent to which both low-level and executive members were involved in organised criminal activity. This supports law enforcement's accounts of OMCG involvement in crimes such as methamphetamine production and distribution, illicit firearms trafficking, tax evasion, money laundering, and serious violent crime (Australian Crime Commission 2015; Australian Criminal Intelligence Commission 2017). The reasons for this move by some OMCGs into organised crime are likely complex and multifaceted, although the seeds for the move have arguably been present in these gangs from their conception—namely, their recruitment of rebellious men, their normalisation of violence, their strong internal hierarchies and paramilitary-style organisation, and their enforcement of gang loyalty and strict codes of silence (Lauchs, Bain & Bell 2015).

Critically, the entry of some OMCGs into the organised crime sphere of criminality coincides with a shift noted by some authors in the profile of gang members (Lauchs 2017). It has been observed that gangs are recruiting a more diverse and ruthless cohort of members, who are increasingly targeted on the basis that they demonstrate the skills, experience and motivations required to carry out more complex and profit-oriented criminal activity (Coyne 2019; Inman & Lowrey 2019; Miranda 2019). In particular, gangs are recruiting 'fearless fighters' who can exercise strength against their enemies (Lauchs 2017). At the same time, prospective members are attracted to these gangs less for the camaraderie and love of motorcycles, and more to exploit gangs' fearsome reputations and generate profit by illicit means (Coyne 2019; Inman & Lowrey 2019; Miranda 2019). Gangs can provide a cover for the operations and mobility of criminal enterprises, and protection through violence and silence (Lauchs 2017). Importantly, while this generational shift has received anecdotal support, little empirical research has been done to validate it.

This trend in recruitment would indicate that gangs are targeting prospective members who already have extensive histories of serious offending. Recent research on Dutch OMCGs has found that OMCG members are more likely than the non-members of a comparison sample to be convicted in adolescence and early adulthood, particularly for violent offending. This indicates that gangs either recruit members with a demonstrated proclivity for crime and violence, or that those kinds of offenders are disproportionately attracted to becoming a gang member (Blokland et al. 2019). Individuals with a propensity for violence may be used in territorial disputes, in building the reputation of the gang or in extortion (Lauchs, Bain & Bell 2015). Indeed, recent Australian research suggests that violence may be used to facilitate organised criminal activity, as gangs with the highest prevalence of organised crime-type offences are among those with the highest prevalence of violence and intimidation offences (Morgan, Dowling & Voce 2020). Criminal background and skills have also been identified as important in the recruitment of members into mafias, gangs and other organised crime groups (Calderoni et al. 2020). As such, individuals who become involved with organised crime at an earlier age may have developed social connections, experience and skills that are valuable to OMCGs.

The changing nature of OMCGs presents new challenges to Australian law enforcement agencies in their efforts to monitor OMCGs and to better understand OMCG recruitment, membership and organisational structures. Despite this, no Australian research has systematically examined the early offending histories of OMCG members and whether they have changed over time. In general, there is very limited OMCG research with large, representative Australian samples, as research has generally relied on open source data, including media reports and court transcripts, and case studies of notorious individuals and events (eg Barker & Human 2009; Lauchs 2017; Lauchs & Staines 2019). This study therefore aims to test the hypothesis that, compared to older OMCG members, younger members have more extensive histories of criminal activity in their adolescence and early adulthood, particularly violence and organised crime offending.

Aims and methods

This study examines shifts in the criminal propensities of Australian OMCG members by analysing the early-life offending profiles of three age cohorts. A longitudinal approach is used to examine the prevalence, frequency and nature of offending by members within each age cohort when aged 12 to 24 years. The three (five-year) age cohorts cover those born between 1979 and 1983, 1984 and 1988, and 1989 and 1993. Trajectory analysis is then used to examine the distinct offending trajectories in the total sample, and whether offenders belonging to a particular cohort or who commit certain types of offences are likely to follow certain trajectories.

Specifically, the research aimed to answer the following research questions:

- How do the three cohorts of OMCG members differ in relation to the prevalence, onset, frequency and severity of early-life offending?
- What are the early-life offending trajectories of OMCG members?
- Are there differences between the three cohorts in relation to these early-life offending trajectories?

Sample

This study analyses a dataset held by the Australian Institute of Criminology's Serious and Organised Crime Research Laboratory (Morgan, Dowling & Voce 2020), which contains information on the criminal histories of 5,665 individuals identified by law enforcement as being affiliated with an OMCG. The sample was created by matching records from the National Gangs List (NGL) and the National Police Reference System (NPRS). Further information on the NPRS and NGL samples and the matching processes used can be found in Morgan, Dowling and Voce (2020).

The dataset includes patched and prospective members; however, associates and supporters were not included. Individuals are classified as either patched or prospective members in the NGL based on law enforcement intelligence. Eighty-four percent of the dataset had a recorded criminal history, and more than 121,000 offences were linked to these individuals. Minor traffic offences (eg speeding and parking offences) were excluded because these offences are not uniformly uploaded to the NPRS by all jurisdictions.

While the focus of the current paper is early-life offending prior to gang membership, the exact date of becoming an OMCG member was not available in the current dataset. The analysis was therefore restricted to offending between the ages of 12 and 24 years. This is in line with similar research using age 25 as a cut-off point for distinguishing the periods of non-OMCG membership and OMCG membership (Blokland et al. 2019), and recent research with a sample of 39 Australian OMCG members showing that they were, on average, 31 years old when they first joined a club (Voce et al. forthcoming).

Of the 5,665 OMCG members, only those born between 1979 and 1993 (n=2,117) were included in the study, to allow analysis of a full 13 years of offending history up until 2018. Information on offending prior to 1990 is of diminished accuracy due to changes in recording practices across Australia. As such, individuals born prior to 1979 were excluded (n=3,374) in addition to those born after 1993 (n=154) or with an unknown date of birth (n=20). Although this study aims to explore changes in the offending profile of OMCG members, it is limited to members who were under the age of 40 at the time of data extraction (in 2019).

Analysis

Those born in the study period (1979 to 1993) accounted for 39 percent of the total population of OMCG members on the NGL. As mentioned, the sample was divided into three cohorts, each spanning five years. The older cohort was born between 1979 and 1983 (n=627, 29.6%), the middle cohort was born between 1984 and 1988 (n=806, 38.1%), and the younger cohort was born between 1989 and 1993 (n=684, 32.3%).

Offences were provided as Australian and New Zealand Standard Offence Classification (ANZSOC) codes, at the four-digit subdivision level. Offences were classified according to the typology developed by Quinn and Koch (2003) and operationalised by Morgan, Dowling and Voce (2020), which categorises offences based on the type of activity, motivation for offending and the degree of planning involved. The following offence categories were used:

- any offence resulting in an apprehension (excluding minor traffic offences);
- violence and intimidation offences, including homicide, assault, kidnapping and threatening behaviour;
- weapons offences, including possessing, selling and using prohibited and regulated weapons;
- ongoing criminal enterprise, including the commercial supply of drugs and firearms, serious fraudulent activity and serious regulatory offences; and
- short-term instrumental offences, including robbery, burglary, theft, minor fraud and non-commercial drug dealing.

Importantly, the violence and intimidation classification does not distinguish between different types or targets of violence. It includes gang violence and other forms of violence directed towards non-gang members, such as family and domestic violence. Criminal enterprise is used 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): offences requiring a high degree of planning, organisation and sophistication. There is some overlap between ongoing criminal enterprise offences and weapons offences, with both offence categories including the import or export of prohibited weapons, and dealing or trafficking in regulated weapons or explosives. Refer to Morgan, Dowling and Voce (2020) for further detail on offence classification. Although the presence of co-offending (ie offences involving two or more offenders) could not be established using these data, which is a limitation of the measure of organised crime involvement used in this study, these offences represent the types of crimes that are typically committed in concert with other individuals.

The prevalence of these offence types at each age was then analysed. Prevalence refers to the proportion of all OMCG members who had at least one recorded offence. Annual and cumulative prevalence are reported for overall offending, while the comparisons between groups are limited to cumulative prevalence only. The difference between groups was analysed using univariate logistic regression, with the younger cohort as the reference group.

Group-based trajectory modelling was used to identify four offending trajectories followed by offenders. Group-based trajectory modelling is a statistical method for analysing how offending changes over age, and assumes that a population is composed of distinct groups following different trajectories (Nagin 2005). Zero-inflated Poisson models were used to examine offending trajectories as the number of offences committed per year of offenders' criminal histories between the ages of 12 and 24 years. The optimal number and form of trajectories was determined using the Bayesian Information Criterion (BIC), the average posterior probabilities of group membership (ie the average probability of individuals classified into a trajectory group actually belonging to that group), and the odds of correct classification for each group (Nagin 2005). Trajectory models were estimated for three, four and five group models during this model selection phase.

The full offending sample was analysed in one trajectory model, rather than modelling the three cohorts individually. If the separate cohort-specific trajectory models differed from the combined trajectory model (with regards to the number of trajectories and/or the polynomial functions defining them) or one another, there is no meaningful way of comparing them beyond a visual and subjective comparison. At best, a trajectory group that was present in the one combined model might be omitted from one of the separate models (indicating that the age cohort so rarely follows that trajectory in the combined model), yet this can also be analysed by disaggregating trajectory group membership by cohort in the combined model results.

Limitations

The final sample was limited to individuals who had been identified by law enforcement as being affiliated with an OMCG and added to the NGL. While the significant investment by law enforcement in the proactive policing of OMCG members increases the likelihood of identification, it is likely that some members may not be included on the NGL, or that membership status is not current. It is also a point-in-time estimate (as at May 2019) of gang affiliation—those individuals who have left an OMCG were removed from the database and are not included in the analysis that follows.

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 a person has been proceeded against by police (ie some legal action has been taken, such as a charge or caution). Similarly, not all offences will have been detected or reported to police, largely because of the characteristic secrecy and loyalty of gang members. Likewise, certain offences are likely to be over-represented in the criminal history of OMCG members because of targeted law enforcement activity and policing at public events such as national motorcycle runs. The picture of criminal activity presented in this paper therefore reflects the range of offences for which OMCG members have been proceeded against.

The focus on selected categories of more serious offence types aims to help distinguish between those offences that are more likely to be detected through routine and proactive law enforcement against OMCGs, and those that are more likely to be reported to law enforcement or identified through an investigation. This is particularly important in terms of accounting for potential differences observed between the younger and older cohorts; individuals in the younger cohort may be more likely to have been apprehended because of the increased government and law enforcement focus on OMCGs, although this is likely to be less relevant to early-life offending prior to gang membership.

Finally, as mentioned the observation period was limited to ages 12 to 24. This was due to limits with historical data, and the need to maximise the size of the sample for the older cohort. A very small proportion of OMCG members may have been apprehended for offences before the age of 12 (since 10 is the age of criminal responsibility in Australia). However, fewer than two percent of the middle and younger cohorts (for whom offending from age 10 could be reliably measured) had recorded offences at age 10 or 11, suggesting the omission of these data had negligible impact on the results.

Results

Prevalence of recorded offending

Figure 1 shows the annual and cumulative prevalence of offending at each age between 12 and 24 years. The annual prevalence is the percentage of the sample (across all three cohorts) who had been apprehended for at least one offence in any given year. The prevalence of any recorded offending increased up to age 18, and was then stable from ages 18 to 24, with around one-third of offenders committing at least one offence. The cumulative prevalence is the proportion of offenders who had been apprehended for at least one offence by each age. Seventy-eight percent of offenders (n=1,641) had committed at least one offence by age 24, while nearly half (n=998, 47%) had been apprehended for at least one offence by age 18.

Figure 1: Annual and cumulative prevalence of recorded offending by age (n=2,117) (%)

Source: OMCG criminal history database 2019 [computer file]

Figure 2 shows the cumulative prevalence of recorded offending for each of the three cohorts. A clear difference emerges between the cohorts from around age 16. For ease of interpretation, the cumulative prevalence of recorded offending at age 18, 21 and 24 was compared across the three cohorts.

Figure 2: Cumulative prevalence of offending, by age and cohort (_n_=2,117) (%)
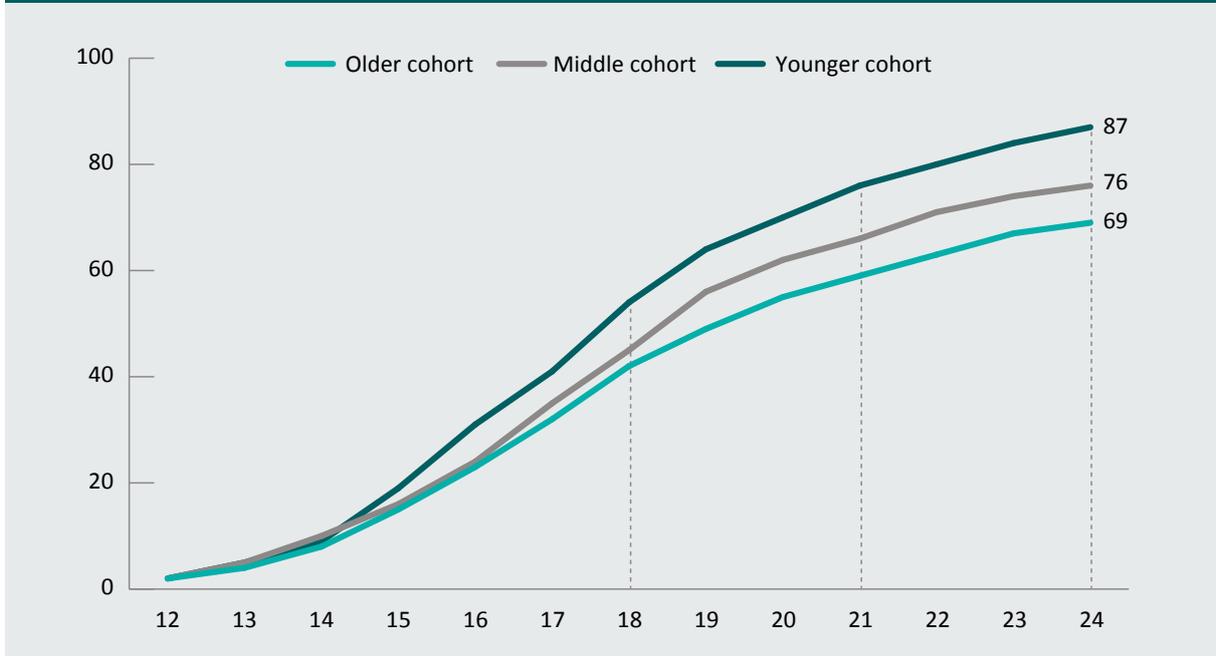
Note: Univariate logistic regressions (with three groups) of the odds of having been apprehended for at least one offence by: _age 18,_ younger cohort _n_=370 (reference group), middle cohort _n_=365 (OR=0.70), older cohort _n_=263 (OR=0.61), χ^2(2, _N_=2,117)=21.16, _p_<0.001; _age 21,_ younger cohort _n_=517 (reference group), middle cohort _n_=531 (OR=0.62), older cohort _n_=627(OR=0.47), χ^2(2, _N_=2,117)=41.32, _p_<0.001; _and age 24_, younger cohort _n_=593 (reference group), middle cohort _n_=616 (OR=0.50), older cohort _n_=432(OR=0.34), χ^2(2, _N_=2,117)=60.30, _p_<0.001

Source: OMCG criminal history database 2019 [computer file]

Compared with the younger cohort, the odds of having been apprehended for at least one offence were significantly lower for both the middle and older cohorts at 18 (_n_=370, 54% younger cohort; _n_=365, 45% middle cohort; and _n_=263, 42% older cohort), 21 (_n_=517, 76% younger cohort; _n_=531, 66% middle cohort; and _n_=627, 59% older cohort) and 24 (_n_=593, 87% younger cohort; _n_=616, 76% middle cohort; and _n_=432, 69% older cohort; see Figure 2 notes for univariate logistic regression results).

Prevalence of violent and profit-motivated offending

The cumulative prevalence of violence and intimidation offences for each of the three cohorts is shown in Figure 3. Forty-seven percent of the sample (_n_=988) had been apprehended for at least one violence and intimidation offence by age 24. The groups diverged from around 16 years old. By age 18, the younger cohort (_n_=183, 27%) was significantly more likely than the middle (_n_=159, 20%) and older (_n_=97, 15%) cohorts to have been apprehended for a violence and intimidation offence. The younger cohort was significantly more likely to have at least one violence and intimidation offence by age 21 (_n_=308, 45%) compared with the middle cohort (_n_=266, 33%) and older cohort (_n_=168, 27%).

By age 24, 58 percent of offenders from the younger cohort (*n*=399) had committed at least one violence and intimidation offence, which was significantly higher than for the older cohort (*n*=225, 36%) and the middle cohort (*n*=365, 45%). There was also a statistically significant difference between the middle and older cohorts at ages 18, 21 and 24 (Figure 3 notes).

Figure 3: Cumulative prevalence of violence and intimidation offences, by cohort (*n*=2,117)

Note: Univariate logistic regressions (with three groups) of the odds of having been apprehended for at least one violence and/or intimidation offence by*: age 18,* younger cohort *n*=183 (reference group), middle cohort *n*=159 (OR=0.67), older cohort *n*=97 (OR=0.50), χ²(2, *N*=2,117)=26.14, *p*<0.001; *age 21,* younger cohort *n*=308 (reference group), middle cohort *n*=266 (OR=0.60), older cohort *n*=168 (OR=0.45), χ²(2, *N*=2,117)=50.15, *p*<0.001; and age 24, younger cohort *n*=399 (reference group), middle cohort *n*=364 (OR=0.59), older cohort *n*=225 (OR=0.40), χ²(2, *N*=2,117)=67.39, *p*<0.001. Univariate logistic regressions (with two groups) of the odds of having been apprehended for at least one violence and/or intimidation offence by: *age 18,* middle cohort *n*=159 (reference group) vs older cohort *n*=97 (OR=0.74), χ²(1, *N*=1,433)=4.35, *p*<0.05; *age 21,* middle cohort *n*=266 (reference group) vs older cohort *n*=168 (OR=0.74), χ²(1, *N*=1,433)=6.43, *p*<0.05; and *age 24*, middle cohort *n*=364 (reference group) vs older cohort *n*=225 (OR=0.68), χ²(1, *N*=1,433)=12.53, *p*<0.001

Source: OMCG criminal history database 2019 [computer file]

The cumulative prevalence of weapons offences for the three cohorts is presented in Figure 4. Twenty-five percent of the sample (*n*=519) had committed at least one weapons offence by age 24. The odds of having been apprehended for a weapons offence were significantly lower for the middle and older cohort at ages 18 (*n*=72, 11% younger cohort; *n*=62, 8% middle cohort; and *n*=37, 6% older cohort; Figure 4 notes) and 21 (*n*=138, 20% younger cohort; *n*=119, 15% middle cohort; and *n*=73, 12% older cohort). By age 24, 34 percent of offenders from the younger cohort (*n*=234) had been apprehended for at least one weapons offence, which was significantly higher than for the middle cohort (*n*=173, 21%) and older cohort (*n*=112, 18%).

Figure 4: Cumulative prevalence of weapons offences, by age and cohort (*n*=2,117) (%)
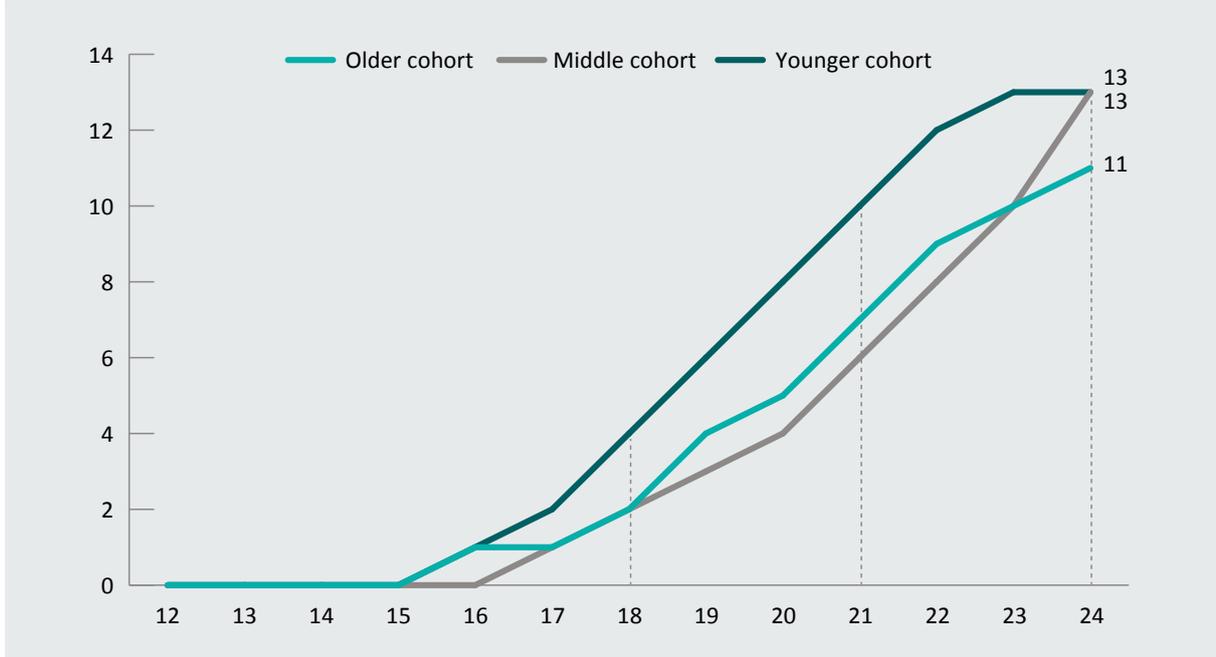

Note: Univariate logistic regressions (with three groups) of the odds of having been apprehended for at least one weapons offence by: *age 18,* younger cohort *n*=72 (reference group), middle cohort *n*=62 (OR=0.71), older cohort *n*=37 (OR=0.53), χ²(2, *N*=2,117)=9.68, *p*<0.01; *age 21,* younger cohort *n*=138 (reference group), middle cohort *n*=119 (OR=0.69), older cohort *n*=73 (OR=0.52), χ²(2, *N*=2,117)=18.76, *p*<0.001; and *age 24*, younger cohort *n*=234 (reference group), middle cohort *n*=173 (OR=0.53), older cohort *n*=112 (OR=0.42), χ²(2, *N*=2,117)=53.77, *p*<0.001

Source: OMCG criminal history database 2019 [computer file]

The cumulative prevalence of ongoing criminal enterprise offending is shown in Figure 5. Unsurprisingly, it was comparatively rare for individuals to have committed ongoing criminal enterprise offences, such as commercial drug supply or serious fraud offences, by their early twenties. Twelve percent of the sample (*n*=260) had been apprehended for at least one criminal enterprise offence by age 24. While the younger cohort was significantly more likely to have been apprehended for an ongoing criminal offence than both the middle and older cohorts at age 18 (*n*=25, 4% younger cohort; *n*=13, 2% middle cohort; and *n*=13, 2% older cohort; Figure 5 notes) and age 21 (*n*=68, 10% younger cohort; *n*=45, 6% middle cohort; and *n*=42, 7% older cohort), there was no difference by age 24. It is possible this reflects the influence of gang membership on offending at this age.

Of those in the sample with at least one criminal enterprise offence, 68 percent had at least one violent offence (*n*=176), 73 percent had at least one short-term instrumental offence (*n*=187), and 56 percent had at least one weapons offence (*n*=146).

Figure 5: Cumulative prevalence of criminal enterprise offences, by age and cohort (*n*=2,117) (%)
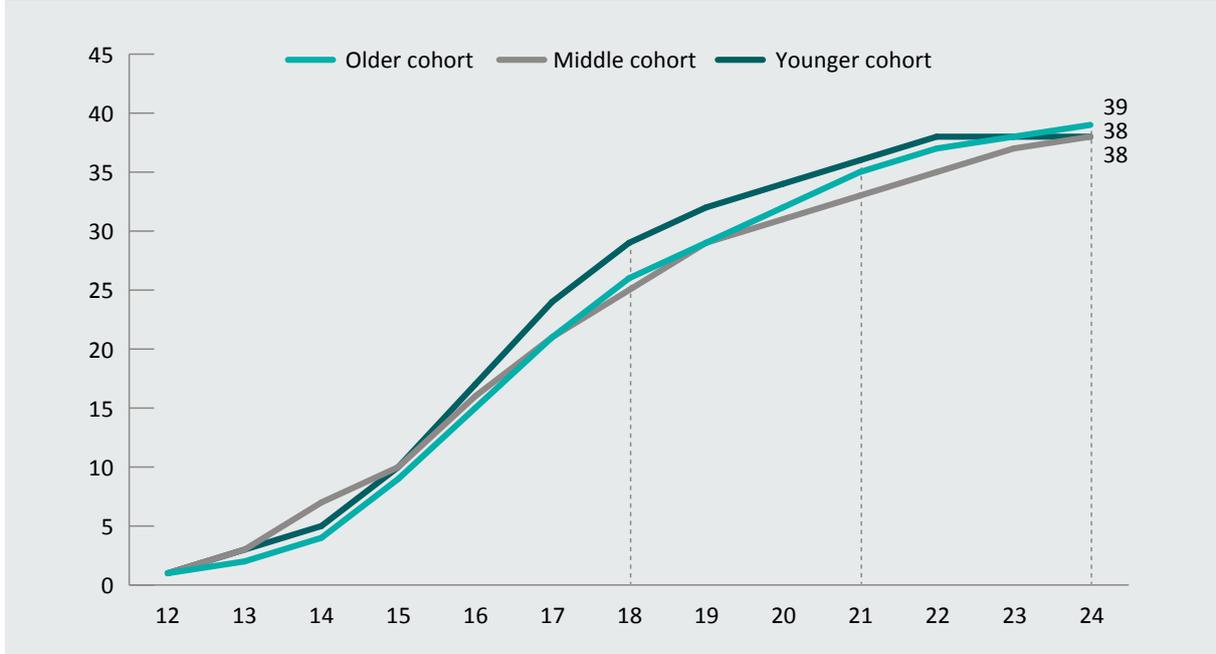

Note: Univariate logistic regressions (with three groups) of the odds of having been apprehended for at least one ongoing criminal enterprise offence by*: age 18,* younger cohort *n*=25 (reference group), middle cohort *n*=13 (OR=0.43), older cohort *n*=13 (OR=0.56), χ²(2, *N*=2,117)=6.99, *p*<0.05; *age 21,* younger cohort *n*=68 (reference group), middle cohort *n*=45 (OR=0.54), older cohort *n*=42 (OR=0.65), χ²(2, *N*=2,117)=10.86, *p*<0.01; and *age 24,* younger cohort *n*=91 (reference group), middle cohort *n*=101 (OR=0.93), older cohort *n*=68 (OR=0.79), χ²(2, *N*=2,117)=1.91, *p*=0.38 (ns)

Source: OMCG criminal history database 2019 [computer file]

The cumulative prevalence of short-term instrumental offending is shown in Figure 6. Thirty-nine percent of the sample (*n*=816) had committed at least one short-term instrumental offence by age 24. There were no significant differences at any age between the cohorts in whether they had committed at least one short-term instrumental offence (Figure 6 notes).

Figure 6: Cumulative prevalence of short-term instrumental offences, by age and cohort (*n*=2,117) (%)


Note: Univariate logistic regressions (with three groups) of the odds of having been apprehended for at least one short-term instrumental offence by: *age 18,* younger cohort *n*=198 (reference group), middle cohort *n*=202 (OR=0.82), older cohort *n*=165 (OR=0.88), χ^2(2, *N*=2,117)=2.92, *p*=0.23 (ns); *age 21,* younger cohort *n*=248 (reference group), middle cohort *n*=267 (OR=0.87), older cohort *n*=219 (OR=0.94), χ^2(2, *N*=2,117)=163, *p*=44 (ns); and *age 24,* younger cohort *n*=263 (reference group), middle cohort *n*=310 (OR=1.00), older cohort *n*=243 (OR=1.01), χ^2(2, *N*=2,117)=0.02, *p*=0.99 (ns)

Source: OMCG criminal history database 2019 [computer file]

Offending trajectories

Using group-based trajectory modelling, a four-group trajectory model of OMCG offending was selected (Figure 7). Examination of the statistical criteria indicated that a four-group model fitted the data more appropriately than a three-group model and had similar measures of fit compared with a five-group model (Figure 7 notes). A four-group model was therefore selected in the interests of parsimony. The trajectory analysis was used to examine the onset, type and frequency of OMCG members' early-life offending prior to their gang involvement, and therefore excluded non-offenders (n=476). The four-group model consisted of moderate-rate offenders (MR; n=612), low-rate offenders (LR; n=840), high-rate early offenders (HRE; n=103) and high-rate late offenders (HRL; n=86).

Figure 7: OMCG offending trajectories (n=2,117)
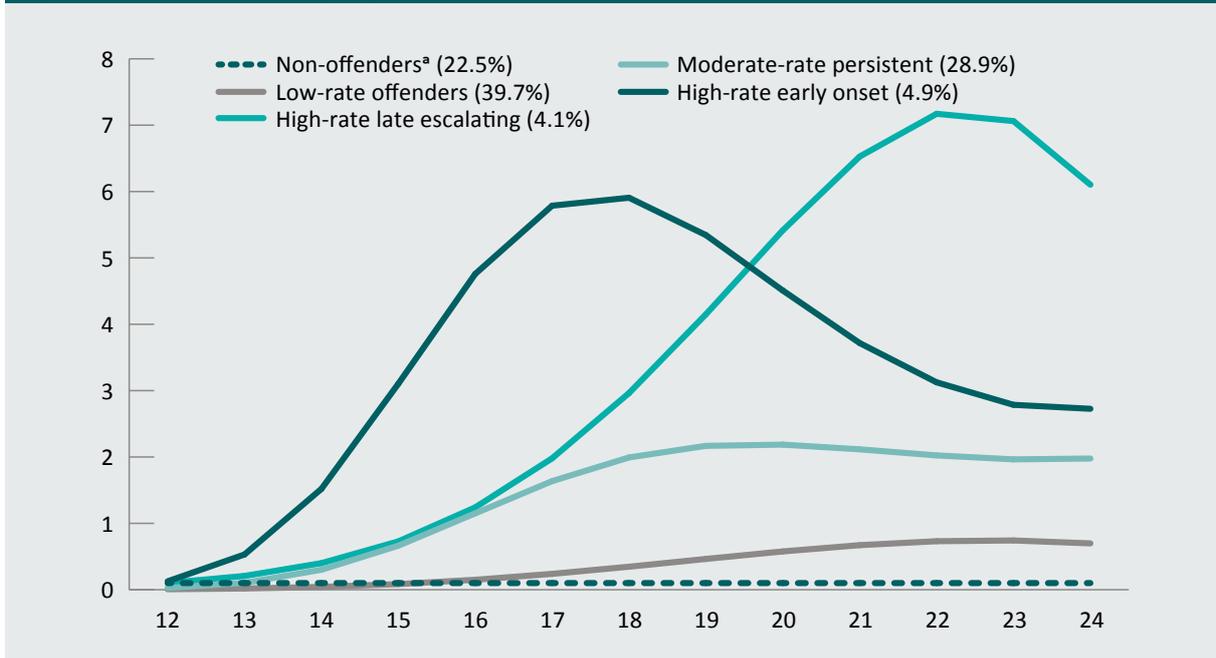
a: Non-offenders were excluded from the four-group trajectory model

Note: Four-group zero-inflated Poisson model, polynomial type of trajectory groups = cubic, quadratic, cubic, cubic. The model had acceptable ratings on the measures of fit, BIC=−27687.10, AIC=−27630.37. The average posterior probability of group membership for individuals classified into each trajectory group exceed the recommended threshold of 0.70 (MR=0.895, LR=0.932, HRE=0.927, HRL=0.946), and the odds of correct classification exceed the recommended threshold of 5.0 for all trajectory groups (MR=14.40, LR=13.04, HRE=190.36, HRL=316.55). Four-group trajectory model was selected over a three-group model (quadratic, cubic, cubic), BIC=−2822.48, AIC=−28179.25, and five-group model (cubic, quadratic, cubic, cubic, quadratic), BIC=−27410.18, AIC=−27342.64

Source: OMCG criminal history database 2019 [computer file]

The moderate-rate offending trajectory is a large group of offenders (29%) who committed their first recorded offence at age 17 and persisted into adulthood, with an average of 18 offences between ages 12 and 24 (see Table 1). The low-rate offending trajectory is another large group whose average age of onset was 19 years and who committed an average of four offences in total. The high-rate early trajectory is a small group of highly active offenders with an average of 32 offences in total. On average, they committed their first recorded offence at age 15, peaked in late adolescence and offended less frequently in adulthood. The high-rate late offending trajectory comprises another small group of offenders who committed their first recorded offence at age 17. Their offending sharply increases in early adulthood and continues at a high rate into their early twenties, with a total of 31 offences on average.

Table 1: Offending characteristics by trajectory group (*n*=1,641)

	Age of onset		Total offences	
	Mean	**SD**	**Mean**	**SD**
Moderate-rate	16.9	2.5	18.3	8.8
Low-rate	19.0	2.8	4.3	3.1
High-rate early	15.4	2.3	31.6	5.8
High-rate late	16.7	2.5	31.0	6.4

Source: OMCG criminal history database 2019 [computer file]

Table 2 shows the breakdown of trajectory group membership by cohort membership. There was a statistically significant relationship between cohort and trajectory group membership ($\chi^2(6)$=17.890, *p*<0.01, *V*=0.07). Offenders in the older cohort were more likely to be in the low-rate offending trajectory. Offenders in the younger cohort were less likely to be in the low-rate offending trajectory, and more likely to be in the high-rate early offending or the high-rate late offending trajectories.

Table 2: Trajectory group membership by cohort (*n*=1,641)

	Older cohort		Middle cohort		Younger cohort	
	n	**%**	**n**	**%**	**n**	**%**
Moderate-rate	148	34	235	38	229	39
Low-rate	240	56[a]	326	53	274	46[b]
High-rate early	22	5	31	5	50	8[a]
High-rate late	22	5	24	4	40	7[a]
Total	**432**	**100**	**616**	**100**	**593**	**100**

a: Cohort is significantly more likely to belong to this trajectory group

b: Cohort is significantly less likely to belong to this trajectory group

Note: $\chi^2(6$, *n*=1,641)=17.890, *p*<0.01, *V*=0.07 (significant differences between cohorts based on adjusted standardised residuals)

Source: OMCG criminal history database 2019 [computer file]

Discussion

This study explored changes in the criminal propensities of Australian OMCG members by examining their early-life offending across three age cohorts. Adolescent and early adult offending was prevalent among gang members, although to different extents and following different developmental pathways. Seventy-eight percent of OMCGs committed at least one offence by age 24, and 38 percent followed moderate to high-rate trajectories characterised by frequent offending. This is markedly higher than offending rates seen in the general population, such as in a recent birth cohort study where 33 percent of all men born in New South Wales during the year 1984 had at least one criminal justice contact (excluding traffic offences) by age 33 (Weatherburn & Ramsey 2018). This builds on previous Australian and international findings of high criminality among OMCG members and the selection of more prolific offenders into gangs (Blokland et al. 2019; Klement 2016; Morgan, Dowling & Voce 2020; Tremblay et al. 1989). Overall, the prevalence of offending increased until age 18, remaining stable until age 24. This was also seen in the trajectory analysis, where offending continued at a stable or increasing rate in three of the four trajectory groups.

Clear differences between the three cohorts emerged from the analysis. The younger cohort was more likely to have committed any crime by ages 18, 21 and 24 and to follow a high-rate offending trajectory. Members in the younger cohort were also more likely to have early-life violence and intimidation and weapons offences recorded. These findings support the generational shifts in OMCG membership towards more violent offenders noted by other authors (Lauchs 2017).

There are two main explanations for the findings observed in this study. The first is that OMCGs are actively recruiting members at a younger age, and that they are becoming involved in gang-related offending earlier in life. The second is that individuals with a history of criminal offending, particularly violent offending, are more likely to join or be recruited into OMCGs. The former would suggest the difference in offending observed in this study reflects offences committed as a member, while the latter assumes these offences largely pre-date OMCG membership. Both are probably true. Certainly, there is evidence from qualitative research that some OMCGs are recruiting younger men who are more willing to engage in criminal activity (Dowling et al. 2021). But research using the same dataset also suggests that, on average, men tend to first join OMCGs in their early 30s, including individuals who joined OMCGs in more recent years (Voce et al. forthcoming).

Importantly, these differences cannot be attributed to a general shift towards more prevalent offending among young people. In fact, results presented here run counter to recent findings from a birth cohort study of individuals born in New South Wales in 1984 and 1994, which showed a large reduction in the proportion of young people committing offences during late adolescence and early adulthood (Payne, Brown & Broadhurst 2018).

OMCG members in the youngest cohort were the most likely to have been apprehended for an ongoing criminal enterprise offence in their late teens and early twenties, although these offences were, compared with violent offences, relatively uncommon. This is unsurprising, given research has shown the average onset age for organised crime offending is much older than the age of OMCG members in this study (Kleemans & de Poot 2008; van Koppen 2010).

Members of the youngest study cohort were more likely to belong to one of the small groups of highly prolific offenders. This may relate to a wider generational trend, where despite a decline in the number of young first-time offenders, chronic offenders are increasingly responsible for a disproportionally great number of recorded offences (Payne, Brown & Broadhurst 2018). Aggressive recruitment tactics by gangs may be targeting these newer waves of chronic offenders. This highlights the importance of identifying and targeting high-risk individuals early in their offending trajectory in order to have the greatest potential for reducing crime and associated harm.

The last decade has seen law enforcement agencies increasingly prioritise the targeting of OMCG members and affiliates (see Monterosso 2018). It is important to consider whether this has led to systematic differences in the risk of offending being detected across the three cohorts. The current dataset does not include information on the date on which OMCG members actually joined a gang. It is likely that young adults who are affiliated with OMCGs or join as members are increasingly likely to be identified, monitored and targeted by police. However, the differences in offending prevalence and frequency between these cohorts emerged in adolescence, almost certainly before individuals were affiliated with an OMCG or known to police as being affiliated with an OMCG. Further, there were significant differences observed between cohorts in offence types (ie violence) less likely to be detected through police enforcement activity.

This is the first study to provide a national picture of recorded offending by members of Australian OMCGs in their adolescence and early adulthood. The findings highlight high rates of criminal activity, particularly violent and profit-motivated crime. The study also provides an empirical foundation for claims that the profile of members joining Australian OMCGs is changing. This is probably due to a combination of individuals with a greater propensity for (and history of) criminal offending being recruited into OMCGs, the enhancement effect of OMCG membership on offending (see Blokland et al. 2019) among individuals joining OMCGs at a younger age, and increased enforcement. The findings can assist in developing effective methods for preventing OMCG recruitment and disrupting the changing nature of OMCG offending.

Acknowledgements

References

URLs current as at November 2020

Australian Crime Commission (ACC) 2015. *Organised crime in Australia 2015.* Canberra: ACC. https://www.acic.gov.au/publications/unclassified-intelligence-reports/organised-crime-australia

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

Barker T 2007. *Biker gangs and organized crime*. New York: LexisNexis

Barker T & Human KM 2009. Crimes of the Big Four motorcycle gangs. *Journal of Criminal Justice* 37(2): 174–9

Blokland A, van Hout L, van der Leest W & Soudijn M 2019. Not your average biker: Criminal careers of members of Dutch outlaw motorcycle gangs. *Trends in Organised Crime* 22: 10–33

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://aic.gov.au/publications/tandi/tandi583

Coyne J 2019. Grasping the magnitude of Canberra's emerging bikie problem. *Canberra Times* 22 February 2019. https://www.canberratimes.com.au/story/5994834/grasping-the-magnitude-of-canberras-emerging-bikie-problem/

Dowling et al. 2021. The changing culture of outlaw motorcycle gangs in Australia. *Trends & issues in crime and criminal justice* no. 615. Canberra: Australian Institute of Criminology. https://www.aic.gov.au/publications/tandi/tandi615

Harris KJ 2016. The fierce commitment to 1% motorcycle clubs. *Journal of Policing, Intelligence and Counter Terrorism* 11(1): 73–83

Inman M & Lowrey T 2019. Bikie gangs have morphed into highly organised crime syndicates, police warn. *ABC News,* 26 February 2019. https://www.abc.net.au/news/2019-02-26/bikies-gang-myths-busted-canberra/10847918

Kleemans ER & de Poot CJ 2008. Criminal careers in organized crime and social opportunity structure. *European Journal of Criminology 5*(1): 69–98

Klement C 2016. Outlaw biker affiliations and criminal involvement. *European Journal of Criminology* 13(4): 453–72

Lauchs M 2017. Nike bikies. In A Bain & M Lauchs (eds), *Understanding the outlaw motorcycle gangs: International perspectives*. Durham, NC: Carolina Academic Press: 115–38

Lauchs M, Bain A & Bell P 2015. Organized crime and outlaw motorcycle gangs. In *Outlaw motorcycle gangs: A theoretical perspective*. Basingstoke: Palgrave Macmillan: 22–37

Lauchs M & Staines Z 2019. An analysis of outlaw motorcycle gang crime: Are bikers organised criminals? *Global Crime* 20(2): 69–89

Miranda C 2019. High-tech Nike Bikies. *Sunday Times*, 23 June 2019. https://www.pressreader.com/australia/the-sunday-times-9029/20190623/283845804925037

Monterosso S 2018. From bikers to savvy criminals. Outlaw motorcycle gangs in Australia: implications for legislators and law enforcement. *Crime Law And Social Change* 69(5): 681–701

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, 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://www.aic.gov.au/publications/tandi/tandi586

Nagin D 2005. *Group-based modeling of development*. Cambridge, MA: Harvard University Press

Payne J, Brown R & Broadhurst R 2018. Where have all the young offenders gone? Examining changes in offending between two NSW birth cohorts. *Trends & issues in crime and criminal justice* no. 553. Canberra: Australian Institute of Criminology. https://aic.gov.au/publications/tandi/tandi553

Parliamentary Joint Committee on the Australian Crime Commission 2009. *Inquiry into the legislative arrangements to outlaw serious and organised crime groups.* Canberra: Commonwealth of Australia. https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Former_Committees/acc/completed_inquiries/2008-10/laoscg/index

Quinn JF & Forsyth CJ 2009. Leather and Rolexs: The symbolism and values of the motorcycle club. *Deviant Behavior* 30(3): 235–65

Quinn J & Koch DS 2003. The nature of criminality within one percent motorcycle clubs. *Deviant Behavior* 24(3): 281–305

Tremblay P et al. 1989. Carrières criminelles collectives: Évolution d'une population délinquante (les groupes de motards). *Criminologie* 22(2): 65–94

van Koppen MV, de Poot CJ, Kleemans ER & Nieuwbeerta P 2010. Criminal trajectories in organized crime. *British Journal of Criminology* 50: 102–23

Voce I et al. forthcoming. Why do outlaw motorcycle gang members join and stay in gangs? *Trends & issues in crime and criminal justice*. Canberra: Australian Institute of Criminology

Weatherburn D & Ramsey S 2018. *Offending over the life course: Contact with the NSW criminal justice system between age 10 and age 33*. Bureau Brief no. 132. Sydney: NSW Bureau of Crime Statistics and Research

Wolf DR 1991. *The Rebels: A brotherhood of outlaw bikers*. Toronto: University of Toronto Press

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