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Examining the overlap of young people's early contact with the police as a person of interest and victim or witness

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Abstract

There is known to be considerable overlap among the victims and perpetrators of crime. However, the extent of this overlap early in life among children and young adolescents is not clear. We examined the sociodemographic profiles of young people who had early contact with police regarding a criminal incident as a person of interest, victim and/or witness, as well as the patterns of multiple police contact types from birth to 13 years of age. Data were drawn from a longitudinal, population-based sample of 91,631 young people from New South Wales, Australia. Among the 10.6% ($n = 9677$) of young people who had contact with police, 14.4% ($n = 1393$) had contact as a person of interest and as a victim and/or witness on two or more separate occasions. The most common first contact type was as a victim/witness, but those children with a first contact as a person of interest were most likely to have at least one further contact. Young people with both types of police contact were younger at first police contact, were more likely to reside in a socioeconomically disadvantaged area, and to be recorded as having an Aboriginal and/or Torres Strait Islander background. Our findings demonstrate that, by 13 years of age, 1 in 10 young people had been in early contact with police and that a minority have contact with the police as both a person of interest and a victim/witness. These young people may represent a particularly disadvantaged group in the community who are likely to be at risk of future adversity, including repeated contact with the criminal justice system.

Keywords

Police contact, social disadvantage, victim-offender overlap, youth offending, youth victimisation

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Introduction

Young people under the age of 18 years are more likely than any other age group to be offenders and victims of crime (Finkelhor et al., 2015; Richards, 2009). Young people

who offend or experience criminal victimisation, particularly before adolescence, are at risk of a wide range of adverse social (e.g., unemployment) and health (e.g., mental illness and physical injury) outcomes that increase the risk of repeated criminal offending and victimisation (Caspi et al., 1998; Piquero et al., 2007; Turner et al., 2010). Thus, early intervention and prevention is vital to prevent enmeshment in the criminal justice system (CJS) and other adverse outcomes. Importantly, however, there is a dearth of research examining CJS contact in relation to victimisation and offending experiences in early life.

There is substantial overlap among the perpetrators and victims of crime (Farrell & Zimmerman, 2018; Jennings et al., 2012; Mulford et al., 2018), including indirect victimisation (i.e., witnessing violence).¹ Estimates from cohort studies indicate that up to one in five young people under 18 years have offended (Morgan & Gardener, 1992; Skrzypiec & Wundersitz, 2005; Weatherburn & Ramsey, 2018). Around half of all young people have also been a victim of direct violence, and a quarter have witnessed violence in the family or community (Finkelhor et al., 2015). While the co-occurrence of criminal offending and victimisation in adult offender and general populations are estimated to range from approximately 20% to 60% (e.g., Aaltonen, 2017; Felson et al., 2017; Klevens et al., 2002), approximately 15% to 30% of young people aged 12 to 25 years are reported to be both victims and offenders (e.g., Beckley et al., 2018; Mulford et al., 2018; TenEyck & Barnes, 2018). Much of this research has relied on self-report surveys due to few official records of crime victimisation (e.g., Klevens et al., 2002; Maldonado-Molina et al., 2010; TenEyck & Barnes, 2018). There has also been a focus on adults, and adolescents aged 12 years and older (e.g., Erdmann & Reinecke, 2019; Mulford et al., 2018), with few studies including younger children. One exception is a study by Maldonado-Molina et al. (2010), who obtained self-report data of offending and victimisation over a four-year period for 1138 children aged 5–13 years at baseline. The proportion of children who were both victims and offenders over the four-year period ranged from 15.3% to 27.4%.

From a developmental life-course perspective, shared risk factors spanning inter-related individual, familial and neighbourhood/community domains (Jennings, 2016) are likely to underpin both victimisation and offending. Indeed, it is well-established that offenders and victims often share sociodemographic profiles (Aaltonen, 2017). In particular, those who are male, experience socioeconomic disadvantage, and are Aboriginal and/or Torres Strait Islander, are at greater risk of direct and indirect victimisation, as well as offending (Australian Bureau of Statistics [ABS], 2016a; Berg & Loeber, 2011; Brennan et al., 2010; Bryant & Willis, 2008; Hartinger-Saunders et al., 2012; Moffitt et al., 2001; Weatherburn & Ramsey, 2016).

Prior research from the New South Wales Child Development Study (NSW-CDS) found that almost one in six children had been in contact with the police for either a criminal or non-criminal incident by 13 years of age, and one-fifth of these children (19.9%) had a history of multiple types of contact (i.e., as a person of interest, victim, or witness; Whitten et al., 2020). The current study extends this work to determine: (i) the extent of overlap in criminal incidents of early police contact types (person of interest and victim/witness) in children and young people; (ii) the sociodemographic profiles of children and young people in early contact with police for both person of interest and victim/witness reasons and (iii) the nature of first police contacts for a

criminal incident and the associated likelihood of having any further police contacts during the study period.

Methods

Participants and procedures

Data for this study were obtained from a state-wide, multi-agency, longitudinal population-based record linkage study of 91,635 children and their parents (www.nsw-cds.com.au; Carr et al., 2016; Green et al., 2018). The NSW-CDS child cohort was defined by inclusion in the 2009 Australian Early Development Census (AEDC) at age five years (Brinkman et al., 2014) and/or the 2015 Middle Childhood Survey conducted at age 11 years (Laurens et al., 2017). Record linkage was conducted by the Centre for Health Record Linkage (the minimum matching variables utilised were name, date of birth, residential address and sex; see Green et al., 2018 for information regarding linkage methods and data collections) with ethical approval from the NSW Population and Health Services Research Ethics Committee (PHSREC AU/1/289807 and PHSREC AU/1/1AFE112) and data custodian approvals granted by the relevant government departments.

Measures

Police contact

Police contact records were obtained from the NSW Police Force Computerised Operational Policing System (COPS) and linked to the NSW-CDS child cohort for those born between 1 January 2002 and 31 December 2005 ($n = 91,631$; four children were born outside these dates). The COPS data include records of all police contacts resulting from criminal (e.g., assault, theft, property damage) and non-criminal incidents (e.g., bail check, traffic accident, 'move along' direction) reported or detected by the NSW Police Force since January 1995 (NSW Bureau of Crime Statistics and Research, 2018). This includes information concerning the date, location and detailed reasons for the contact. It also includes the type of contact with the police, designated as either person of interest, victim or witness. A *person of interest* refers to an individual who has not necessarily been arrested or formally accused of a crime, but is of interest to the police during their investigation of an event or incident (Ringland, 2013). *Victim* refers to a person who suffers harm as a direct result of an act committed, or apparently committed, by another person during a criminal offence (NSW Police Force, 2012). A *witness* is a person who saw, heard or experienced something related to a criminal offence (LawAccess NSW, 2018).

In this study, we limited our examination to police contacts relating to criminal incidents corresponding to the 2001 Australian and New Zealand Standard Offence Classification offence categories (ABS, 2011). Young people's police contact data were available from the time of their birth (ranging 2002–2005) to May 2018, when they were on average 14.7 years of age ($SD = 0.37$; range 13–16 years). We right censored

the police contact data at age 13 years to ensure that all children had equal periods of observation.²

Children could be recorded as having more than one type of contact in relation to a single event of police contact (e.g., contact as both a person of interest and victim). Later in this paper, we examine the predictors of further police contact following first contact as a person of interest or victim/witness. We define further police contact as contact with police at least one or more days *after* the first contact. Young people who only ever had contact with police as a person of interest or victim/witness were designated ‘person of interest-only’ or ‘victim/witness-only’,³ respectively. Those who had contact with police as both a person of interest and victim/witness, at either the same or separate criminal event, were categorised into an ‘overlap category’. All patterns of contact were coded as either present or absent. To investigate early first police contact, we derived a variable based on the first recorded time a young person had contact with the police for any of the three reasons.

Sociodemographic factors

Four sociodemographic factors associated with youth criminal justice contact were considered. The child’s sex and Aboriginal and/or Torres Strait Islander (Indigenous) background were obtained from data pertaining to all available datasets. Maternal age at childbirth (categorised into three levels: ≤ 25 years; 26–35 years; ≥ 36 years) was obtained from the NSW Register of Births, Deaths, and Marriages’ Birth Registrations and the NSW Ministry of Health’s Perinatal Data Collection. Socioeconomic disadvantage was derived using the Socio-Economic Index for Areas (SEIFA) available in the AEDC (i.e., based on school postcode at the time of school entry at approximately five years of age), using the SEIFA Index of Relative Socio-Economic Disadvantage based on the average income and employment status for each residential postcode in Australia (Australian Government, 2011). SEIFA quintile scores consist of five levels from the most disadvantaged (quintile 1) to the least disadvantaged (quintile 5).

Data Analysis

We first present descriptive statistics for the number and proportion of young people in contact with the police as a person of interest and/or victim/witness, stratified by sex, Indigenous background, socioeconomic disadvantage and maternal age at the child’s birth. Next, we present the results of a series of multinomial logistic regression analyses detailing the univariate and multivariate associations between the sociodemographic factors and patterns of police contact, relative to those with no police contact for a criminal incident. Logistic regression analyses were then conducted to examine the univariate and multivariate association between first police contact type and the odds of further contact with police for any reason, and as a person of interest or victim/witness, separately, relative to those with only one event of police contact. These analyses are restricted to young people who have at least one police contact ($n = 9677$).

Multinomial and logistic regression analysis provide odds ratios (ORs) and 95% confidence interval (CI) as measures of effect size and the precision of the estimated

association between the exposure and outcome variables. ORs between 1.00 and 1.49 (or 1.00–0.67) were interpreted as small effects/weak association, 1.50–2.49 (or 0.66–0.40) as medium/moderate, 2.50–4.00 (or 0.39 to 0.25) as large/strong and >4.00 (or <0.25) as very large/strong (Rosenthal, 1996). Results were considered statistically significant if the 95% CI did not cross 1.00. Due to reporting restrictions required to protect privacy, results were omitted for cells with fewer than 15 children. Data analysis was conducted using IBM SPSS version 25 (IBM, 2017).

Results

Police contact types and sociodemographic profiles

Approximately 1 in 10 (10.6%; $n = 9677$) children in the NSW-CDS had been in contact with police by 13 years of age (see Table 1). The most common incidents resulting in police contact, for any reason, were assault (42.3%; $n = 4089$), sex offence (28%; $n = 2711$) and theft (18.8%; $n = 1818$). The most common type of police contact was as a victim/witness-only (67%; $n = 6480$), followed by person of interest-only (18.6%; $n = 1804$). Assault was the most common incident involving contact as a victim/witness-only (43.2%; $n = 2799$), followed by sex offence (30.7%; $n = 1988$) and intimidation/stalking/harassment (15.1%; $n = 980$). Theft (24.4%; $n = 440$), transport regulation offence (22.5%; $n = 405$) and assault (17.4%; $n = 314$) were the most common incidents involving contact as a person of interest-only. One in seven children with any police contact (14.4%; $n = 1393$) had both types of police contact, and the majority of these children (70.7%; $n = 985$) had a first contact as a victim/witness. The most common reasons for police contact among children recorded as both a person of interest and a victim/witness were assault (70.1%; $n = 976$), theft (44.1%; $n = 615$) and sex offence (38.5%; $n = 38.5\%$). The sociodemographic profiles of children with no police contact, at least one police contact for any reason and the three categories of police contact (i.e., person of interest-only, victim/witness-only, or person of interest and victim/witness) are presented in Table 1.

Table 2 presents the associations between sociodemographic factors and categories of police contact. The highest unadjusted ORs were for Indigenous background (unadjusted ORs ranging up to 12.74 (95% CI = 11.41–14.23) for children with both types of police contact). Boys were more likely than girls to be in the person of interest-only and the group recorded as both a person of interest and a victim/witness, whilst girls were more likely to be in the victim/witness-only group. Young maternal age at birth (≤ 25 years) and living in the most socioeconomically disadvantaged area at the time of school entry were associated with all types of police contact. The strongest associations were consistently observed for the group recorded as both a person of interest and a victim/witness. A similar pattern of association was observed after adjustment for all covariates.

We also conducted sensitivity analyses (results available on request) to ensure that the findings for the group of children with both types of contact were not simply due to having multiple contacts (i.e., at least two) by repeating analyses on a sample limited to children with two or more police contacts ($n = 3510$). Findings were broadly comparable to the original analyses; however, the unadjusted ORs for Indigenous background

Table 1. Sociodemographic characteristics of groups defined on the basis of patterns of police contact type (n = 91,631).

	No contact (n = 81,954; 89.4%)	Any contact (n = 9677; 10.6%)	POI only (n = 1804; 18.6%)	VIC/WIT only (n = 6480; 67.0%)	POI & VIC/WIT (n = 1393; 14.4%)
Sex					
Male	42,067 (51.3%)	5355 (55.3%)	1339 (74.2%)	3144 (50.4%)	872 (62.6%)
Female	39,887 (48.7%)	4322 (44.7%)	465 (25.8%)	3336 (51.5%)	521 (37.4%)
Aboriginal/Torres Strait Islander					
Yes	4619 (5.6%)	2280 (23.6%)	496 (27.5%)	1182 (18.2%)	602 (43.2%)
No	77,335 (94.4%)	7397 (76.4%)	1308 (72.5%)	5298 (81.8%)	791 (56.8%)
SEIFA ^a					
Quintile 1 (most disadvantaged)	18,296 (23.6%)	3190 (34.7%)	571 (33.4%)	2048 (33.2%)	571 (43.0%)
Quintile 2	14,721 (19.0%)	2083 (22.6%)	383 (22.4%)	1407 (22.8%)	293 (22.1%)
Quintile 3	13,414 (17.3%)	1543 (16.8%)	277 (16.2%)	1044 (16.9%)	222 (16.7%)
Quintile 4	13,329 (17.2%)	1258 (13.7%)	235 (13.8%)	887 (14.4%)	136 (10.2%)
Quintile 5 (least disadvantaged)	17,905 (23.1%)	1127 (12.2%)	242 (14.2%)	779 (12.6%)	106 (8.0%)
Maternal age at child's birth ^b					
25 and below	11,134 (16.6%)	2765 (34.1%)	534 (35.6%)	1773 (32.3%)	458 (40.7%)
26–35	42,333 (63.2%)	4167 (51.3%)	763 (51.8%)	2868 (52.2%)	536 (47.6%)
36 and above	13,509 (20.2%)	1186 (14.6%)	204 (13.6%)	850 (15.5%)	132 (11.7%)
Age at first contact (years) x(SD)	NA	9.3 (3.7)	11.8 (1.9)	8.7 (3.8)	8.7 (3.6)

POI: person of interest; VIC: victim; WIT: witness; NA: not applicable; OR: odds ratio; CI: confidence interval; SD: standard deviation.

^aSEIFA data were available for 86,866 (94.8%) of the 91,631 children in the cohort. Of those with any police contact, data were available for 9201 (95.1%) children.

^bMaternal age data were available for 75,094 (82.0%) of the 91,631 children in the cohort. Of those with any police contact, data were available for 8118 (83.9%) children.

among children in the person of interest-only and victim/witness-only groups and the adjusted ORs among children in the person of interest-only group increased.

Patterns of police contacts over time

The sociodemographic profiles of children with multiple contacts with police over separate days, compared to children with one contact, are presented in Table 3. Almost one quarter (23.8%; $n = 2305$) of children had multiple police contacts during the study period. Nearly one-third (30.8%; $n = 690$) of children whose first contact was as a person of interest had further contact as a person of interest, whereas 7.2% ($n = 120$) had further contact as a victim/witness. Among children whose first contact was as a victim/witness, 5.9% ($n = 366$) had further contact as a person of interest and 19.4% ($n = 1415$) had further contact as a victim/witness. Indigenous children were overrepresented in both types of further contact groups, with contact as a person of interest having the highest proportion (49.9% vs. 33.8%). Almost half of the children who had any further contact lived in the most socioeconomically disadvantaged area at the time of school entry and had a young mother (≤ 25 years).

Models examining the role of first police contact type, along with sociodemographic covariates, in predicting further contact among those with multiple events recorded, relative to those with only a single police contact, are presented in Tables 4 (unadjusted) and 5 (adjusted). In the unadjusted model, first police contact as a person of interest was associated with greater odds of further contact as a person of interest (OR = 7.36; 95% CI = 6.40–8.47), but lower odds of further contact as a victim/witness (OR = 0.32; 95% CI = 0.26–0.39). Likewise, first contact as a victim/witness was associated with greater odds of a further contact as a victim/witness (OR = 3.19; 95% CI = 2.61–3.90), but lower odds of further contact as a person of interest (OR = 0.14; 95% CI = 0.12–0.16). Children who were of Indigenous background, resided in the most disadvantaged areas, had an earlier age of first police contact, or had a mother aged 25 years or younger at birth, were more likely to have further contact with police for any reason. As presented in Table 5, adjustment for all covariates resulted in a similar pattern of association; however, an earlier age of first police contact had a significant, although weak, association with further contact as a person of interest when first contact was as a person of interest.

Discussion

This study showed that by 13 years of age, 1 in 10 (10.6%; $n = 9677$) children had been in early contact with police in relation to a criminal incident; among these children, 14.4% ($n = 1393$) had been in contact with police as both a person of interest and a victim/witness. While the overlap among offenders and victims is well-established in adults and older adolescents, there is little evidence of this earlier in life. The extent of such overlap identified here falls in the lower range of the few studies providing comparable data (reported rates ranging from 15% to 30%; Beckley et al., 2018; Maldonado-Molina et al., 2010; TenEyck & Barnes, 2018), likely due to the relatively young age of our sample. As demonstrated in other studies (Beckley et al., 2018; Erdmann & Reinecke, 2019), extending our observation period to later adolescence

Table 3. First police contact type and sociodemographic characteristics in relation to subsequent contact, amongst those with at least one police contact (n = 9677).

	No further contact (n = 7372; 76.2%)	Any further contact (n = 2305; 23.8%)	POI further contact (n = 1043; 40.6%)	VIC/WIT further contact (n = 1528; 59.4%)
Age of first contact (years) x (SD)	NA n %	8.21 (3.8) n %	9.5 (3.3) n %	7.2 (3.8) n %
First contact ^a	NA			
Person of interest	NA	730 32.1	690 30.8	120 7.2
Victim/Witness	NA	1591 21.3	366 5.9	1415 19.4
Sex				
Male	4072 55.2	1283 55.7	756 72.5	683 44.7
Female	3300 44.8	1022 44.3	287 27.5	845 55.3
Aboriginal/Torres Strait Islander				
Yes	1393 18.9	887 38.5	520 49.9	516 33.8
No	5979 81.1	1418 61.5	523 50.1	1012 66.2
SEIFA ^b				
Quintile 1 (most disadvantaged)	2277 32.5	913 41.7	438 44.3	599 41.2
Quintile 2	1578 22.5	505 23.1	207 20.9	351 24.2
Quintile 3	1212 17.3	331 15.1	145 14.7	225 15.5
Quintile 4	1025 14.6	233 10.6	104 10.5	150 10.3
Quintile 5 (least disadvantaged)	920 13.1	207 9.5	95 9.6	128 8.8
Maternal age at child's birth (years) ^c				
25 and below	1922 31.0	843 43.8	368 44.1	578 44.3
26–35	3295 53.2	872 45.3	373 44.7	585 44.8
36 and above	976 15.8	210 10.9	93 11.2	143 10.9

POI: person of interest; VIC: victim; WIT: witness; NA: not applicable; SD: standard deviation.

^aFirst contact groups are not mutually distinct. Some children may have more than one contact type in a single contact event.

^bSEIFA data were available for 7012 (95.1%) of the 7372 children with no further contact. Of those with any further contact, data were available for 2189 (95%) children.

^cMaternal age data were available for 6193 (84.0%) of the 7372 children with no further contact. Of those with any further contact, data were available for 1925 (83.5%) children.

Table 4. Unadjusted odds ratios of associations between first police contact type, sociodemographic covariates and further contact with the police (n = 9677).

Covariates	Any further contact (n = 2305) OR (95% CI)	POI further contact (n = 1043) OR (95% CI)	VIC/WIT further contact (n = 1528) OR (95% CI)
First contact^a			
Person of interest	1.75 (1.57–1.94)	7.36 (6.40–8.47)	0.32 (0.26–0.39)
Victim/Witness	0.57 (0.51–0.63)	0.14 (0.12–0.16)	3.19 (2.61–3.90)
Age of first contact	0.90 (0.89–0.92)	0.99 (0.97–1.01)	0.85 (0.84–0.86)
Male	1.02 (0.93–1.12)	2.14 (1.85–2.46)	0.66 (0.59–0.73)
Aboriginal/Torres Strait Islander	2.69 (2.42–2.97)	4.27 (3.73–4.88)	2.19 (1.94–2.47)
SEIFA^b			
Quintile 1 (most disadvantaged)	1.78 (1.51–2.11)	1.83 (1.47–2.36)	1.89 (1.54–2.32)
Quintile 2	1.42 (1.19–1.71)	1.27 (0.98–1.64)	1.60 (1.29–1.99)
Quintile 3	1.21 (1.00–1.47)	1.16 (0.88–1.52)	1.33 (1.06–1.69)
Quintile 4	1.01 (0.82–1.24)	0.98 (0.73–1.32)	1.05 (0.82–1.35)
Quintile 5 (least disadvantaged; reference)	–	–	–
Maternal age at child's birth (years)^c			
25 and below	1.66 (1.49–1.85)	1.69 (1.45–1.97)	1.69 (1.49–1.93)
26–35 (reference)	–	–	–
36 and above	0.81 (0.69–0.96)	0.84 (0.66–1.07)	0.83 (0.68–1.00)

POI: person of interest; VIC: victim; WIT: witness; OR: odds ratio; CI: confidence interval.

^aFirst contact groups are not mutually distinct. Some children may have more than one single contact type in a contact event.

^bSEIFA data were available for 7012 (95.1%) of the 7372 children with no further contact. Of those with any further contact, data were available for 2189 (95%) children.

^cMaternal age data were available for 6193 (84.0%) of the 7372 children with no further contact. Of those with any further contact, data were available for 1925 (83.5%) children.

would likely increase the proportion of young people who have contact with police, since older teenagers are at higher risk of victimisation (Finkelhor et al., 2009) and the prevalence of first contact with the CJS as an offender increases from the age of 13 and peaks at age 19 years (Weatherburn & Ramsey, 2018).

There was little difference between boys and girls in the prevalence of any police contact, as well as contact as a victim/witness only. However, children who had person of interest-only contacts and those who had been recorded as having contact with police as both a person of interest and victim/witness were more likely to be boys, in line with previous evidence on the overlap between offenders and victims (Maldonado-Molina et al., 2010), and young male offenders (Moffitt et al., 2001). Vulnerable young boys may therefore need to be specifically targeted in victimisation and offending prevention strategies. The absence of gender differences among the group recorded with police contact as a victim/witness-only differs from previous evidence indicating that males are at greater risk of victimisation compared to females (Brennan et al., 2010). A possible explanation for the lack of difference in police contact rates among younger children may be due to the similarity between boys and girls with regard to their physical/psychological characteristics and typical activities (Finkelhor, 2008).

Table 5. Adjusted odds ratios of associations between first police contact type, sociodemographic covariates and further contact with the police (n = 6193 with complete data).

Covariates	Person of interest further contact		Victim/witness further contact	
	Model 1 (first contact POI) OR (95% CI)	Model 2 (first contact VIC/WIT) OR (95% CI)	Model 3 (first contact POI) OR (95% CI)	Model 4 (first contact VIC/WIT) OR (95% CI)
First contact ^a				
Person of interest	10.05 (8.22–12.29)	–	0.49 (0.39–0.62)	–
Victim/Witness	–	0.11 (0.09–0.13)	–	2.12 (1.67–2.70)
Age of first contact	0.87 (0.86–0.91)	0.89 (0.87–0.92)	0.87 (0.86–0.89)	0.87 (0.86–0.89)
Male	1.44 (1.21–1.73)	1.43 (1.20–1.71)	0.69 (0.61–0.79)	0.69 (0.61–0.79)
Aboriginal/Torres Strait Islander	3.00 (2.52–3.57)	3.01 (2.54–3.58)	1.72 (1.49–1.99)	1.73 (1.49–2.00)
SEIFA ^b				
Quintile 1 (most disadvantaged)	1.32 (0.99–1.76)	1.32 (0.99–1.75)	1.41 (1.11–1.78)	1.41 (1.11–1.78)
Quintile 2	1.03 (0.76–1.40)	1.02 (0.75–1.40)	1.28 (1.00–1.63)	1.13 (1.00–1.63)
Quintile 3	0.93 (0.67–1.29)	0.94 (0.68–1.34)	1.11 (0.86–1.45)	1.11 (0.86–1.44)
Quintile 4	0.95 (0.67–1.33)	0.96 (0.68–1.34)	0.94 (0.71–1.24)	0.93 (0.71–1.23)
Quintile 5 (least disadvantaged; reference)	–	–	–	–
Maternal age at child's birth (years) ^c				
25 and below	1.23 (1.03–1.47)	1.23 (1.03–1.48)	1.37 (1.20–1.58)	1.37 (1.19–1.58)
26–35 (reference)	–	–	–	–
36 and above	1.03 (0.80–1.34)	1.03 (0.79–1.33)	0.88 (0.71–1.08)	0.88 (0.71–1.08)

Adjusted analyses are adjusted for all other covariates in the table. POI: person of interest; VIC: victim; WIT: witness; OR: odds ratio; CI: confidence interval.

^aFirst contact groups are not mutually distinct. Some children may have more than one contact type in a single contact event.

^bSEIFA data were available for 7012 (95.1%) of the 7372 children with no further contact. Of those with any further contact, data were available for 2189 (95%) children.

^cMaternal age data were available for 6193 (84.0%) of the 7372 children with no further contact. Of those with any further contact, data were available for 1925 (83.5%) children.

Children living in the most disadvantaged area at the time of school entry had a higher prevalence of all types of police contacts, with the highest rate evident among those with police contact as both a person of interest and victim/witness, consistent with previous findings (Aaltonen, 2017; Berg & Loeber, 2011). Almost half (43.2%) of the children with police contact as both a person of interest and victim/witness were of Indigenous background. Disadvantaged areas experience higher crime rates, with increased rates of offending and victimisation amongst residents (Newburn, 2016). Moreover, the occurrence of child abuse, maltreatment and the witnessing of domestic violence is more concentrated in disadvantaged areas (Australian Institute of Health and Welfare [AIHW], 2019; Doidge et al., 2017). Our findings suggest that children who experience social disadvantage are vulnerable to both offending and victimisation, and that Indigenous children are particularly vulnerable.

The overrepresentation of Indigenous youth in the Australian CJS is a matter of national concern, with Aboriginal and/or Torres Strait Islander young people comprising approximately half of all those under youth justice supervision while constituting only around 5% of all young people in Australia (ABS, 2016b; AIHW, 2019). Likewise, Indigenous people are two to three times more likely to be victims of crime than non-Indigenous people (ABS, 2016a). This overrepresentation is likely a reflection of the extensive social and economic adversity many Indigenous people in Australia face as a result of the generations of trauma, racism, colonisation and dispossession (Bryant & Willis, 2008; Snowball & Weatherburn, 2008).

It is well-established that an early onset of offending is a risk factor of further offending (Farrington, 2003); in our study, the type of first police contact was identified as an important predictor of later contact with police, with first contact as a person of interest being strongly associated with any further contact as person of interest. First contact as a victim/witness was associated with an increased likelihood of a further victim/witness contact, in line with research that demonstrates that re-victimisation is common (Ellonen & Salmi, 2011). One unexpected finding was that first contact as a victim/witness was not associated with an increased likelihood of any further person of interest contact. While both indirect and direct victimisation are known to be associated with an increased risk of offending (Hartinger-Saunders et al., 2011), the young age of our sample may have limited our ability to examine such longitudinal relationship fully, particularly given that the peak of offending occurs in mid-to-late adolescence (Weatherburn & Ramsey, 2018).

There is a current debate to raise the Australian minimum age of criminal responsibility from 10 to 14 years of age (Cunneen, 2017), owing to the potential for enmeshment in the CJS to have a negative impact on life chances, the overrepresentation of Indigenous young people amongst those in contact with the CJS, and the fact that many children involved in the CJS come from disadvantaged backgrounds (Australian Human Rights Commission, 2020). It is hoped that a raise in age will lead to more alternative strategies to deal with young offenders, such as early prevention and intervention programs. Our study supports the concerns regarding Indigenous children and children from disadvantaged backgrounds by showing evidence of very early contact with the CJS. Many programs target children at risk from middle childhood (e.g., NSW Youth on Track which targets children from 10 years; NSW Department of Justice, 2017). However, the underpinnings of prosocial, antisocial behaviour and other

vulnerabilities are likely to be formed in the first five years of life (Loeber & Farrington, 2000), so it is vital to target vulnerable children as early as possible. Early first contact with police may be an effective way to identify those in need of early intervention/prevention, as this event might flag the presence of underlying vulnerabilities. Early individual and family prevention programs, such as home-visiting programs that target young mothers (e.g., behavioural parent training) and their young children, are some of the most effective programs for CJS contact prevention (Farrington & Welsh, 2003; Greenwood, 2008). For example, the ‘Nurse Family Partnership Program’ (developed in the USA) is a pre- and post-natal home-visiting program with evidence of capacity to reduce child abuse and also offending by children of high-risk mothers (Welsh & Zane, 2018). In Australia, a modified Nurse–Family Partnership delivered by Indigenous community-controlled organisations is currently operating across multiple locations, with early indications of a reduction in child protection system involvement (Segal et al., 2018).

Individual and familial risk factors are commonly incorporated in support programs; however, neighbourhood disadvantage is less often addressed given the inherent complexity (McGee et al., 2011). One way to address offending and victimisation in disadvantaged areas may be through justice reinvestment, where funding identified for imprisonment is redirected to provide community-based prevention/intervention programs in places with high crime rates, poverty and social inequality (Gooda et al., 2013). The redirected funding is often used for crime-specific programs, but also for victim services and programs that target broader disadvantage (Willis & Kapira, 2018). Hence, a whole-of-government approach may be suitable for disadvantaged and remote Indigenous communities, where barriers to service access and lack of infrastructure are well-recognised. Attempts to implement justice reinvestment can face the same challenges as other programs; however, a higher degree of community ownership can assist in implementation (Schwarz, 2010). Additionally, implementation requires culturally competent services and practices for Indigenous communities (Price-Robertson & McDonald, 2011).

Strengths and limitations

The present study has the advantage of being nested within a larger longitudinal record-linkage cohort that is representative of the NSW population (Green et al., 2018), which lessens the impact of possible sampling (selection and attrition) and information (recall and observer) biases. Another strength is that the inclusion of informal police contacts (i.e., not necessarily leading to formal charges or other criminal justice sanctions) avoids the need to limit CJS contacts occurring from the age of criminal responsibility (age 10 years in all Australian jurisdictions; Australian Institute of Criminology, 2005). There are, however, limitations to this study. The administrative data were not originally collected for these research purposes, such that there may be a range of other factors not recorded in these data (e.g., family-level socioeconomic disadvantage) that explain the overlap in police contact types we observed. Despite using informal police contacts to indicate offending behaviour and victimisation experiences amongst young people, this study may still underestimate the occurrence these events that do not come to the attention of the police. Whether or not police are involved in a particular event is

unlikely to be random; police contact may be affected by a range of factors such as over-policing of young people and their families if already known to the police, increased visibility of groups of young people congregating in public in some communities and targeting of Indigenous communities (Cunneen et al., 2016). Lastly, a person of interest who come into contact with the police may have had no legal action commenced against them and may be innocent of any crime. Hence, there may be children categorised as a person of interest who have not engaged in antisocial/offending behaviour.

Conclusion

This study addresses an evidence gap in relation to understanding the nature and extent of overlap between offending and victimisation in early life and by focusing on police contact rather than post-police CJS involvement. We found that children recorded with both types of police contact were more likely to be characterised by a wide range of indicators of disadvantage, highlighting the need for targeted early identification and intervention programs that consider a range of risk factors to reduce the risk of later adversity. A child's first contact with police, for any reason, may present an important opportunity for early intervention to be offered to these vulnerable children and their families. Policy and practice solutions are, however, likely to be complex and may be better addressed at the community rather than statutory level in many cases. Early identification may carry a potential risk of labelling and stigmatisation (Becker, 1963) and could lead to unintended enmeshment of children and their families in formal services. Hence, there is a need for carefully crafted policies and interventions to be developed and rigorously tested before being assumed to address the need to early identification and intervention in this group. Future research should examine other types of early childhood risk factors (e.g., individual and parental) underpinning the overlap between offending and victimisation, to inform targeted evidence-based early prevention and intervention programs.

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Notes

1. For example, Farrell and Zimmerman (2018) and Maldonado-Molina et al. (2010) included witnessing violence in their victimisation measures.
2. There was no significant difference in the average age of first police contact between children born in 2002–2003 ($n = 62,636$) and 2004–2005 ($n = 28,995$) (mean = 7.92 years vs. mean = 7.98 years; $t = -.775$, $p = .439$).
3. Preliminary analyses found virtually no differences between the patterns of results related to victims compared to witnesses.

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