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# ORIGINAL ARTICLE



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# Relationships between parental mental illness and/or offending and offspring contact with the police in childhood: Findings from a longitudinal record-linkage study

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#### Abstract

Background: Parental offending and mental illness are associated with an increased risk of criminal behaviour in offspring during adolescence and adulthood, but the impact of such problems on younger children, including children's experiences of victimisation, is less well known.

Aim: To investigate the associations between parental offending and mental illness recorded prior to their offspring's age of 5 years and their offspring's contact with police as a 'person of interest', 'victim' or 'witness' between ages 5 and 13 years.

Methods: Our sample consisted of 72,771 children and their parents drawn from the New South Wales Child Development

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Study, an Australian longitudinal population-based record linkage study. Logistic regression analyses were conducted to examine associations between parental factors and offspring's police contact. Separate models examined the relationships between maternal or paternal offending and mental illness, as well as the combination among either or both parents, as the independent variables, and their child's police contact as the dependent variable.

Results: Parental offending and mental illness were each individually associated with indices of police contact among offspring. Stronger associations were observed when both offending and mental illness were present together (in either parent, or when one parent had both exposures). Stronger associations were evident for mothers with both factors across all offspring police contact types, relative to fathers with both factors, in fully adjusted models; that is, children of mothers with both factors were over four times as likely to have contact with police as a 'person of interest' (OR = 4.29; 95% CI = 3.75-4.92) and over three times as likely to have contact as a victim (OR = 3.35; 95% CI = 3.01-3.74) or witness (OR = 3.58; 95% CI = 3.03-4.24), than children whose mothers had no history of offending or mental illness. Conclusions: Children with a parental history of offending and mental illness in early life are at an increased likelihood of early police contact as young as 5-13 years of age; it is vital that this is taken as a signal to help them and their affected families according to need.

#### KEYWORDS

children's contact with the police, parental mental illness, parental offending, person of interest, victim, witness

## 1 | INTRODUCTION

Young people in early contact with the criminal justice system are at increased risk of repeated contact (Athanassiou et al., 2021; Farrington, 2003), as well as of mental health and substance use problems, poor educational outcomes and unemployment (Blomberg et al., 2011; Caspi et al., 1998; Farrell & Zimmerman, 2018). Understanding factors associated with early criminal justice contact could help identify and support these vulnerable children and their families. While one of the risk factors known to be associated with early criminal justice contact is parental adversity (Jennings et al., 2012), research on intergenerational patterns of justice contacts has been limited to antisocial/externalising behaviour but not victimisation experiences, to court or custodial contact but not earlier police contact, and to offspring outcomes beyond childhood (e.g., Raudino et al., 2013; Tzoumakis et al., 2019). Apart from the child

maltreatment research field, there is a dearth of research examining factors associated with children's criminal justice contact as a victim (including indirect victimisation, as a witness to crime/violence). Breadth of parental influences on offspring contacts with the justice system is also lacking from research conducted to date, despite evidence that parental mental illness (Dean et al., 2012; Valuri et al., 2017), as well as parental offending (Besemer et al., 2016; Thornberry et al., 2009) is likely to underpin vulnerability for both offending and victimisation among young offspring.

The question of whether a mother's or father's offending or mental illness is more likely than not to have an impact on the criminal justice contacts of their offspring in early life is also important. A full understanding of the separate influence of paternal and maternal offending history on offspring offending behaviour has arguably been limited by the low prevalence of female offenders in study samples to date (e.g., Besemer, 2012; Bijleveld & Wijkman, 2009). While some studies suggest that there is little difference between the effect of maternal and paternal offending on offspring offending (Beaver, 2013; Besemer et al., 2016), others have reported a greater effect of paternal, than maternal, offending (Farrington et al., 2001, 2009). Stronger associations have also been reported between mother and daughter offending (Besemer et al., 2017; Tzoumakis et al., 2020). Of those studies comparing the effects of maternal and paternal mental illness, findings suggest that the sex of the parent may not have a differential impact on offspring offending (Dean et al., 2012; Mok et al., 2016).

Notably, the risk of offspring *victimisation* (direct and indirect) leading to criminal justice contact has largely been unexamined in prior studies of parental risk factors and offspring contact with the justice system, while research on child maltreatment has revealed associations between offspring victimisation and parental offending or mental illness (Doidge et al., 2017; Stith et al., 2009). The role of other mediating factors such as economic, emotional and social stressors are also highlighted in this area of research (Austin, 2016). Despite limited research comparing the role of maternal or paternal risk factors in relation to child maltreatment, maternal factors are often reported to be the strongest influences on risk of out-of-home care (OOHC), relative to paternal risk exposures (Franzén et al., 2008; Green et al., 2019).

One important consideration for studies of parental risk factors in relation to offspring justice contact is the overlap between offending and mental health problems. There is a well-known increased risk of offending amongst people with severe mental illnesses (Fazel et al., 2009; Yee et al., 2020), yet, only a few studies have attempted to delineate the unique effects of parental offending and mental illness on offspring offending, with findings to date suggesting parental offending potentially confounds (and/or mediates) associations between parental mental illness and offspring offending (Dean et al., 2012; Valuri et al., 2017).

Given the limitations in the extant literature, we aimed to examine the relationships between parental offending with or without mental illness and subsequent offspring police contact in childhood. We specifically set out to answer the following questions: (1) Is there an association between parental offending and/or mental illness and offspring police contact for offending or victimisation (direct and indirect)?; (2) What are the unique, as well as shared, associations between parental offending and mental illness, and offspring police contact?; (3) Does the strength of association between offspring police contact and parental factors differ according to whether the offending and/or mental illness is maternal or paternal?

#### 2 | METHODS

### 2.1 | Ethical approval

Data linkage was carried out by the Centre of Health Record Linkage using probabilistic linkage methods across a minimal set of identifiers (i.e., name, date of birth, residential suburb/postcode and sex) in accordance with strict privacy protocols, and with ethical approval from the NSW Population and Health Services Research Ethics Committee (PHSREC AU/1/289807 and PHSREC AU/1/1AFE112); researchers obtained de-identified records for analysis only.

# 2.2 | Participants and procedures

Data were drawn from the New South Wales Child Development Study (NSW-CDS), an Australian longitudinal population-based record linkage study using data from multiple government agencies for 91,635 children (Green et al., 2018). Some parent data were available for the 75,184 children whose births were registered in the state of NSW, including 73,994 unique maternal records and 71,531 unique paternal records. Optimal linkage rates were achieved across record sets for the child and parent cohorts, with a false-positive rate of approximately 0.5% (Green et al., 2018). The NSW-CDS cohort is demographically representative of the NSW population (Green et al., 2018). For the study reported here, the sample was selected to ensure that the timing of parental offending/mental illness was within the first five years of the child's life, with offspring police contact subsequent to that, yielding a sample with all available data for analyses comprised of 72,771 children (n = 37,659 boys and n = 35,112 girls).

# 2.3 | Measures

# 2.3.1 | Offspring police contact

Children's police contact data were available for members of the NSW-CDS child cohort born between 2002 and 2005, from the time of their birth until May 2018 (mean age = 14.7 years; SD = 0.37; range 13-16). The period of observation for the occurrence of police contact commenced on 1 January 2009, when the children were about age 5 years and in the year in which most entered their first year of full-time schooling, and was right censored at age 13 years so that all children were followed until the same age (see Whitten et al., 2020). Police data were obtained from the NSW Police Force Computerised Operational Policing System (COPS), containing records of all police contacts resulting from criminal or non-criminal incidents reported or detected by the NSW Police Force (NSW Bureau of Crime Statistics and Research, 2018). The Police records classify the type of contact that a young person has with the police for each incident, either as a 'person of interest', 'victim' or 'witness' and include information concerning the date and detailed reasons for the contact. In this context a person of interest is defined as an individual who has not necessarily been formally accused of a crime but is of interest to the police during the investigation of a criminal incident, such as assault, robbery or fraud, or a non-criminal incident, such as traffic accident, natural disaster and missing person; a victim is a person who suffers harm as a direct result of a criminal or non-criminal incident investigated by police; a witness is a person who sees, hears or experiences a criminal or non-criminal incident investigated by police (Whitten et al., 2020). It was possible for children to have contact with police for more than one reason during the observation period and previous analyses have identified considerable overlap (see Athanassiou et al., 2021). Police contact in relation to 'children at-risk' incidents or mandatory reporting requirements were not included. It should be noted that police contact can be for a range of reasons, and can include positive interventions initiated by police.

## 2.3.2 | Parental mental illness

Data on maternal and paternal mental illness were obtained from the NSW Ministry of Health's Admitted Patient Data Collection (APDC; 2000–2016), Mental Health Ambulatory Dataset (MH-AMB; 2000–2016) and Emergency Department Data Collection (EDDC; 2005–2016). The APDC records all public and private hospital admissions, the MH-AMB all public outpatient or community mental health service contact and the EDDC comprises records on emergency department presentations for most NSW public hospitals. Parents who had been recorded in at least one of these datasets as having a primary or secondary diagnosis corresponding to a chapter V (mental, behavioural and neurodevelopmental disorders; F00–F99) International Classification of Diseases—Australian Modification (ICD-10 AM) code on at least one occasion were classified as having a history of mental illness.



## 2.3.3 | Parental offending

Parental offending records were obtained from the NSW Bureau of Crime Statistics and Research Reoffending Database, and indices of parental offending (including separately for mothers and fathers) were derived from data up to 31 December 2008 (i.e., prior to the commencement of the observation period for offspring police contact). The data contain information on all finalised charges/offences dealt with by the NSW Criminal Justice System since 1 January 1994 for all individuals convicted of at least one offence.

# 2.3.4 | Combined parental factors (mental illness and offending)

Parental mental illness and parental offending variables were also combined to produce the following exposure variables: combined maternal factors, where mother had a history of both mental illness and offending; combined paternal factors, where father had a history of both mental illness and offending; and a combined parental factor, where at least one parent had a history of offending and at least one parent, whether the same parent or the other parent, had a history of mental illness.

## 2.3.5 | Covariates

Four covariates known to be associated with criminal justice contact as a young person were considered as potential confounding variables. The child's sex and Aboriginal and/or Torres Strait Islander background were obtained from data derived from all available records. Maternal age at the child's birth (categorised into three levels: ≤25 years; 26–35; ≥36) 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) Index for Relative Socioeconomic Disadvantage based on the child's residential postcode at birth. SEIFA is based on the average income and employment status for each residential postcode in Australia (Australian Government, 2011) and categorised into quintiles the most (quintile 1) to the least disadvantaged (quintile 5).

## 2.3.6 | Statistical analyses

Descriptive statistics were obtained to establish the proportion of children in contact with the police as a 'person of interest', 'victim' and 'witness' in the total sample (n = 72,771), and the prevalence of such contact in relation to the parental illness or offending categories and covariates. Logistic regression analyses were conducted to examine associations between parental factors and offspring police contact. As the parental exposure variables and offspring outcome variables were not mutually exclusive, separate multivariable models were computed to include the following independent variables: (1) (i) any parental offending and (ii) any parental mental illness; (2) (i) maternal offending, (ii) maternal mental illness, (iii) paternal offending and (iv) paternal mental illness; (3) (i) combined parental offending and mental illness; and; (4) (i) combined maternal offending and mental illness and (ii) combined paternal offending and mental illness. All multivariable models were adjusted for child sex, Aboriginal and/or Torres Strait Islander background, SEIFA and maternal age at child's birth.

Unadjusted and adjusted odds ratios (ORs) for each covariate were computed. Since the co-occurrence of mental illness and criminal offending was quite common, parental mental illness was included in multivariate analyses in the parental offending models and conversely offending was included in multivariate analyses in the mental illness models. To investigate whether the effects of particular maternal and paternal factors were independent of each other, we also adjusted for maternal factors in the multivariate paternal models and paternal factors in the multivariate

maternal models. Finally, in supplementary analyses, results for boys and girls were obtained separately. Results were considered statistically significant if the 95% confidence interval (CI) did not cross 1.00. ORs between 1.00 and 1.49 were interpreted as weak associations, 1.50 and 2.49 as moderate, 2.50 and 4.00 as strong and >4.00 as very strong (Rosenthal, 1996). Due to reporting restrictions required to avoid re-identification of individuals in the sample, results were omitted for cells with fewer than 15 children. Data analysis was conducted using IBM Statistics version 26 (IBM, 2019).

# 3 | RESULTS

# 3.1 | Description of the sample

Over 9000 (9684, 13%) of the 72,771 children in the study had at least one police contact for any reason between the ages of 5 and 13 years. Their details are set out in Table 1. There were more boys (n = 5266; 14%) than girls (n = 4418; 13%) with police contact (see also Supplementary Online Tables S1 and S2). Among those with at least one police contact, the most common contact type was as a 'victim' (n = 7439; 77%), followed by 'person of interest' (n = 3001; 31%) and 'witness' (n = 1909; 20%). Over two-thirds (n = 6818; 70%) of the children with police contact, however, had at least one contact for a criminal incident; of those children with 'person of interest' contact, the vast majority (n = 2650; 88%) were the 'person of interest' in a criminal incident. Two-thirds of children with 'victim' contact (n = 4972; 67%) had at least one criminal incident contact as a 'victim', and among those in contact with police as a 'witness', most (n = 1619; 85%) had witnessed at least one criminal incident. Among the children with police contact for any reason, half (n = 4923; 51%) had at least one parent with a history of offending and one-third (n = 3028; 31%) had a parent with mental illness; nearly one quarter (n = 2237; 23%) had a parent or parents with a combination of offending and mental illness history. The most common diagnoses among parents in our sample were depressive, anxiety and neurotic disorders (maternal n = 5779, 8%; paternal n = 2420, 3%), other adult-onset disorders (maternal n = 3119, 4%; paternal n = 2224, 3%) and substance use disorders (maternal n = 1866, 3%; paternal n = 2500, 3%).

## 3.2 | Associations between parental factors and offspring contact with the police

Results of the unadjusted logistic regression models for each outcome of interest are presented in Table 2. Parental offending, parental mental illness and their combination were all associated with police contact among offspring. Associations for parental offending history were particularly strong (OR range: 3.02–7.96), the strongest associations being with offspring police contact as a 'person of interest' (OR range: 5.50–7.96). The associations between parental mental illness and offspring police contact were of slightly smaller magnitude (OR range: 2.69–5.05), with the strongest associations found for paternal mental illness (OR range: 3.47–5.05). Offspring police contact as a 'person of interest' had the strongest associations with all categories of parental exposure (OR range: 3.61–5.05). Combined parental offending and mental illness was also strongly associated with offspring police contact, whether evident in any parent (OR range: 4.77–7.71), in mothers (OR range: 6.37–11.13) or in fathers (OR range: 4.72–7.56). Children whose mothers had a history of both offending and mental illness had the largest odds of contact with police, regardless of the contact type. Additional analyses conducted separately for boys and girls are presented in Supplementary online Tables S1 and S2.

Following adjustment for covariates (in nine separate models according to risk factor set), all associations remained statistically significant but somewhat reduced in strength (see Table 3). Notably, the effect size for mothers with a combination of both exposures remained very strong for offspring 'person of interest' contact, and were moderate to strong in other models. Similarly, the association between combined maternal factors and offspring outcomes retained larger magnitudes of association than combined paternal factors. The adjusted analyses indicated that the effects of maternal and paternal offending, mental illness and combined mental illness and offending were independent of each other.

TABLE 1 Sociodemographic and parental characteristics for groups of children defined by patterns of police contact type (for criminal and non-criminal incidents)

contact type (for criminal and non-crim	iiriai iriciderits)				
	N = 72,771		N = 9684		
	No contact (n = 63,087)	Any contact (n = 9684)	Person of interest contact (n = 3001)	Victim contact (n = 7439)	Witness contact (n = 1909)
Child's sex					
Male	32,393 (51.3%)	5266 (54.4%)	1991 (66.3%)	3788 (50.9%)	973 (51.0%)
Female	30,694 (48.7%)	4418 (45.6%)	1010 (33.7%)	3651 (49.1%)	936 (49.0%)
Aboriginal/Torres Strait Islander					
Yes	3411 (5.4%)	1787 (18.5%)	890 (29.7%)	1339 (18.0%)	461 (24.1%)
No	59,676 (94.6%)	7897 (81.5%)	2111 (70.3%)	6100 (82.0%)	1448 (75.9%)
Socioeconomic disadvantage					
Quintile 1 (most disadvantaged)	11,333 (18.1%)	2268 (23.4%)	771 (25.7%)	1709 (23.0%)	503 (26.3%)
Quintile 2	11,755 (18.6%)	2343 (24.2%)	759 (25.3%)	1828 (24.6%)	486 (25.5%)
Quintile 3	13,414 (21.3%)	2110 (21.8%)	657 (21.9%)	1618 (21.8%)	426 (22.3%)
Quintile 4	6935 (11.0%)	909 (9.4%)	259 (8.6%)	709 (9.5%)	159 (8.3%)
Quintile 5 (least disadvantaged)	19,076 (30.2%)	1952 (20.2%)	516 (17.2%)	1496 (20.1%)	318 (16.7%)
Missing	574 (0.9%)	102 (1.1%)	39 (1.3%)	79 (1.1%)	17 (0.9%)
Maternal age at birth (years)					
25 and below	9904 (15.7%)	2856 (29.5%)	1093 (36.4%)	2197 (29.5%)	603 (31.6%)
26-35	40,327 (63.9%)	5219 (53.9%)	1476 (49.2%)	4009 (53.9%)	1003 (52.5%)
36 and above	12,778 (20.3%)	1604 (16.6%)	429 (14.3%)	1230 (16.5%)	303 (15.9%)
Missing	78 (0.1%)	<15	<15	<15	<15
Parental offending					
Any parent	15,230 (24.1%)	4923 (50.8%)	1948 (64.9%)	3716 (50.0%)	1163 (60.9%)
Maternal	3752 (5.9%)	2100 (21.7%)	1005 (33.5%)	1587 (21.3%)	576 (30.2%)
Paternal	13,800 (21.9%)	4529 (46.8%)	1820 (60.6%)	3411 (45.9%)	1094 (57.3%)
Parental mental illness					
Any parent	8336 (13.2%)	3028 (31.3%)	1166 (38.9%)	2404 (32.3%)	697 (36.5%)
Maternal	5864 (9.3%)	2092 (21.6%)	810 (27.0%)	1672 (22.5%)	484 (25.4%)
Paternal	3239 (5.1%)	1530 (15.8%)	644 (21.5%)	1207 (16.2%)	392 (20.5%)
Combined parental factors					
Any parent mental illness and any parent offending	3737 (5.9%)	2237 (23.1%)	981 (32.7%)	1758 (23.6%)	562 (29.4%)
Maternal mental illness and offending	1025 (1.6%)	922 (9.5%)	466 (15.5%)	739 (9.9%)	250 (13.1%)
Paternal mental illness and offending	1911 (3.0%)	1244 (12.8%)	573 (19.1)	971 (13.1%)	331 (17.3%)

# 4 | DISCUSSION

In a large, longitudinal, population-based sample of children followed from school entry at about 5–13 years of age, parental history of offending and mental illness was associated with early police contact among offspring, particularly for contact as a 'person of interest' but also as a 'victim' and 'witness'. Children of parents with a combined history

TABLE 2 Summary of unadjusted odds ratios of associations between parental factors and children's police contact types (criminal and non-criminal incidents) compared to those with no contact

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Any contact		Person of interest contact	Victim contact	Witness contact		
	Parental factors	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	
	Parental offending					
	Any parent offending	3.25 (3.11-3.40)	5.81 (5.38-6.28)	3.14 (2.99-3.29)	4.90 (4.46-5.38)	
	Maternal offending	4.38 (4.13-4.64)	7.96 (7.33-8.65)	4.29 (4.02-4.58)	6.83 (6.16-7.58)	
	Paternal offending	3.14 (3.00-3.28)	5.50 (5.10-5.94)	3.02 (2.88-3.18)	4.79 (4.37-5.26)	
	Parental mental illness					
	Any parent mental illness	2.99 (2.85-3.14)	4.17 (3.86-4.51)	3.14 (2.97-3.31)	3.78 (3.43-4.16)	
	Maternal mental illness	2.69 (2.54-2.84)	3.61 (3.31-3.93)	2.83 (2.66-3.01)	3.31 (2.98-3.69)	
	Paternal mental illness	3.47 (3.25-3.70)	5.05 (4.60-5.55)	3.58 (3.33-3.84)	4.78 (4.25-5.37)	
	Combined parental factors					
	Any parent mental illness and any parent offending	4.77 (4.50-5.05)	7.71 (7.10-8.38)	4.92 (4.62-5.23)	6.63 (5.97-7.35)	
	Maternal mental illness and offending	6.37 (5.81-6.98)	11.13 (9.91-12.51)	6.68 (6.06-7.37)	9.12 (7.88–10.57)	
	Paternal mental illness and offending	4.72 (4.38-5.09)	7.56 (6.82-8.36)	4.81 (4.43-5.21)	6.72 (5.91-7.62)	

*Note*: The total sample size for Any Contact = 72,095–72,771; Person of Interest Contact = 65,475–66,088; Victim Contact = 69,873–70,526; Witness Contact = 64,405–64,996.

TABLE 3 Summary of adjusted odds ratios of associations between models and children's police contact type (criminal and non-criminal incidents) compared to those with no contact

	Any contact	Person of interest contact	Victim contact	Witness contact
Parental factors	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Parental offending				
Any parent offending	2.22 (2.12-2.33)	3.39 (3.10-3.70)	2.11 (2.00-2.23)	3.13 (2.82-3.48)
Maternal offending	2.09 (1.95-2.24)	2.90 (2.62-3.20)	2.04 (1.89-2.20)	2.73 (2.42-3.08)
Paternal offending	1.95 (1.85-2.05)	2.72 (2.49-2.98)	1.86 (1.76-1.97)	2.64 (2.37-2.94)
Parental mental illness				
Any parent mental illness	2.01 (1.91-2.12)	2.30 (2.11-2.50)	2.15 (2.03-2.28)	2.25 (2.03-2.49)
Maternal mental illness	1.78 (1.64-1.89)	1.89 (1.71-2.08)	1.88 (1.76-2.01)	1.85 (1.65-2.09)
Paternal mental illness	1.76 (1.80-2.07)	1.87(1.67-2.08)	1.84 (1.70-2.00)	1.96 (1.72-2.23)
Combined parental factors				
Any parent mental illness and any parent offending	3.32 (3.12-3.53)	4.43 (4.03-4.86)	3.44 (3.22-3.69)	4.19 (3.73-4.70)
Maternal mental illness and offending	3.21 (2.90-3.56)	4.29 (3.75-4.92)	3.35 (3.01-3.74)	3.58 (3.03-4.24)
Paternal mental illness and offending	2.52 (2.32-2.74)	2.94 (2.61-3.32)	2.54 (2.31-2.78)	2.94 (2.54-3.41)

*Note*: Adjusted for Aboriginal/Torres Strait Islander, child's sex, socioeconomic disadvantage (quintile), maternal age. Parental offending was adjusted for parental mental illness. Parental mental illness was adjusted for parental offending. Maternal factors were adjusted for paternal factors and paternal factors were adjusted for maternal factors. The total sample size for Any Contact = 72,095; Person of Interest Contact = 65,475; Victim Contact = 69,873; Witness Contact = 64,405.

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of offending and mental illness had the highest odds of police contact. This is likely to reflect the cumulative effect of parental adversity and the shared underlying mechanisms (e.g., socioeconomic disadvantage and parenting difficulties; Besemer et al., 2017; Thornberry et al., 2003). Children exposed to cumulative parental adversities may be particularly vulnerable to police contact, indicating a role for early identification and preventative intervention.

The strong associations found between parental mental illness and offspring police contact as a 'person of interest' align with the findings of previous studies in relation to court-defined justice outcomes for offspring occurring later in adolescence and adulthood (Dean et al., 2012; Valuri et al., 2017). Similarly, associations between parental offending history and early offspring contact with the police as a 'person of interest' are consistent with prospective studies on the intergenerational transmission of offending (e.g., Beaver, 2013; Kendler et al., 2015; Thornberry et al., 2003; van de Weijer et al., 2014). Of importance, our findings for associations between parental offending and mental illness show how very early in their lives such children are likely to be affected.

We found little difference in the strength of associations between maternal or paternal offending history and children's police contact, in line with a number of previous studies (e.g., Beaver, 2013; van den Rakt et al., 2009). Similarly, there was little difference in strength of associations between maternal and paternal mental illness in relation to an association with offspring police contacts, again consistent with previous studies of older offspring (Dean et al., 2012; Mok et al., 2016). While not the focus of the current study, preliminary analyses suggested that intergenerational associations are slightly stronger in girls than boys. Future studies of sex-specific intergenerational transmission of criminal justice system contact, focussed on specific outcomes in childhood, are warranted.

Parental offending and mental illness were associated not only with offspring 'person of interest' police contact, but importantly also with 'victim' and 'witness' contact, with over three-quarters of children in contact with police having contact as victims. Although there is a lack of research with which to compare our findings directly, both parental offending and parental mental illness are known to be associated with reported child maltreatment (Austin, 2016). Indeed, it may be that records of parental offending and offspring police contact for victimisation in the current study relate to child maltreatment by parents. Other explanations may include environmental factors, such as low income that may follow mental illness or justice involvement, or other family circumstances that increase the likelihood of both parental adversity and child victimisation. Beyond the need to prevent children's experiences of indirect and direct victimisation given the inherent harm involved, both these types of victimisation have been shown to be associated with an increased likelihood of offending (Farrell & Zimmerman, 2018; Hartinger-Saunders et al., 2011) and re-victimisation (Athanassiou et al., 2021; Ellonen & Salmi, 2011), in addition to the link between indirect exposure to violence and risk of direct victimisation (Finkelhor et al., 2015; Hamby et al., 2010).

Other than early identification of vulnerable children, a number of targeted family and parenting programmes may provide effective strategies for reducing both child antisocial behaviour and child maltreatment (Piquero et al., 2016; Welsh & Zane, 2019), including the Triple P Programme (Turner & Sanders, 2006) and the related Mental Health Positive Parenting Programme adapted for parents with mental illness (Phelan et al., 2013).

## Strengths and limitations

The current study has the advantage of being nested within a large population-based cohort that is representative of the broader Australian population (Green et al., 2018), with data available for both mothers and fathers enabling analyses not possible in previous research. The reliance on linked routinely and historically collected administrative data reduces the likelihood of biases in sampling (selection and attrition) and information gathering (recall and observer). Police contact is the earliest form of justice contact and thus avoids the need to limit the examination of criminal justice contacts occurring only from the age of criminal responsibility (age 10 years in all Australian jurisdictions); the use of Police data also enables consideration of offending behaviour and victimisation from the same data source. While we have not focussed solely on police contacts for 'criminal' events, as is the case with studies reliant on court or custodial justice data, we suspect that all types of police contact may reflect offspring vulnerability, as does the

ability to consider contact as a 'victim' and 'witness' in addition to 'person of interest'. There are, however, limitations to this study. The administrative data were not originally collected for research purposes and may be subject to minor coding errors and limited examination of potential mediators/confounders to those available in existing datasets. Consequently, we were unable to consider factors such as family size and whether children and parents were living together at any particular point in time (Farrington & Crago, 2016; Farrington et al., 2009; van de Weijer et al., 2015). Future research should consider the role of such factors, including child-specific factors that we did not consider, such as developmental problems present from birth or in early life (e.g., foetal alcohol syndrome; Bower et al., 2018). Parental offending and mental illness were considered on a dichotomous basis only and could be further explored in future research by examining the nature, timing and duration of this exposure. The current study likely underestimates children's offending behaviour and victimisation experiences, as not all events come the attention of police and 'children at-risk' incidents or mandatory reporting requirements were not included in our police data. Finally, the observation time for children's police contact varied in the current study according to child age at the start of the follow-up.

## 5 | CONCLUSION

Parental history of offending and/or mental illness is associated with increased odds of their children having early contact with the police, including contact as a 'person of interest', 'victim' and/or 'witness'. This highlights the need to identify vulnerable parents and their children as early as possible. Given the particularly strong associations seen when parental offending and mental illness are both present, it is important that programmes and policies allow for the impact of these combined adversities on young children, as well as the way in which interventions might need to be tailored. Early police contact may present a novel opportunity to identify vulnerable children and families in need of support.

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# **CONFLICTS OF INTEREST**

None.

#### **DATA AVAILABILITY STATEMENT**

These data are not available by request from the authors as they remain owned by the Australian government. External parties wishing to access Australian government data must apply to the data custodians directly.

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#### SUPPORTING INFORMATION

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