

# Trends & issues

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**Foreword** | *While it has been established that there is an intergenerational transmission of criminal behaviour (ie crime can run through generations in families), the role of gender in the intergenerational transfer of criminality has not been fully explored. The impact of a father's criminality on the subsequent offending of his sons and grandsons has been established, but the impact of a father's criminality on the offending of his daughter and the impact of a mother's criminal history on the offending of her sons and/or daughters is less clear. This Tasmanian study of six known criminal families identifies clear differences in the intergenerational transfer of criminality from mothers to their sons and daughters. The influence of paternal (a father's) criminality on children of both genders is strong, but is particularly strong for male children. The more severe the criminal offending history, the greater likelihood of intergenerational transmission. To prevent the cycle of crime, policymakers should focus their attention on reducing environmental risk through intervention programs targeting children known to be at increased risk of involvement in crime due to the criminality of their parents. Such interventions should incorporate attempts to address the children's perceptions of themselves as 'criminals' in order to reduce the risk of 'self fulfilling prophecy'.*

Adam Tomison  
Director

## Crime families: Gender and the intergenerational transfer of criminal tendencies

Vanessa Goodwin and Brent Davis

Extensive research in criminology has established that criminality, or criminal offending, can be transmitted through generations within families. Both genetic and environmental mechanisms appear to play a role, although the precise way in which these mechanisms interact to predict criminal behaviour is still unclear (De Lisi et al. 2009). Intergenerational studies that examine the role of gender in the intergenerational transfer of criminality, that is, from fathers to daughters, from mothers to sons and mothers to daughters, are rare. Most of the existing research on the intergenerational transmission of criminality has been conducted in the United States, the United Kingdom and The Netherlands, with only limited research undertaken in Australia. This paper attempts to redress that imbalance by exploring the role of gender in the intergenerational transfer of criminality among six known criminal families in Tasmania.

One of the best-known studies to examine the concentration of offending in families is the Cambridge Study in Delinquent Development (CSDD), a longitudinal survey of 411 South London males who were followed from eight to 50 years of age (Farrington, Coid & Murray 2009).

The most recent publication based on the CSDD compares the conviction records of the study males (G2—second generation within a family) with their parents (G1—first generation included in the study) and their biological sons and daughters (G3—grandchildren of G1). Farrington, Coid and Murray (2009) found there was significant intergenerational transmission of criminal tendencies from G1 males to G2 males; 63 percent of the study males with convicted fathers were convicted themselves compared with 33 percent of those with unconvicted fathers (OR=3.5).

The degree of intergenerational transfer was similar from G2 males to G3 males (grandsons; OR=3.2), but was less evident from G1 females to G2 males (OR=2.3) and from G2 males to G3 females (granddaughters; OR=2.0).

Controlling for family (eg poor parental supervision, family disruption), socioeconomic (eg low family income, large family size) and individual (eg low school attainment, high impulsivity) risk factors reduced the degree of intergenerational transmission. The father's criminal history, however, still played an important role in predicting the son's convictions even after controlling for these risk factors.

Similar findings were reported in the Pittsburgh Youth Study in the United States where information about the offending history of the relatives of 1,395 Pittsburgh boys aged eight, 11 or 14 years was obtained from the boys' parents. (Farrington et al. 2001). While arrests of siblings, parents, grandparents, uncles and aunts all predicted the delinquency of the boys, the criminal history of their father was the most important factor in predicting subsequent offending by the boys.

However, having an arrested father was not an independent predictor for the delinquency of the boys after controlling for the following eight explanatory variables:

- having a young mother (aged 17 years or less at the time of first birth);
- African-American ethnicity;
- living in a neighbourhood rated as *bad* (based on 1990 Census data on family income, the number of single parent, female-headed households and the percentage of persons aged 10–14 years);
- low guilt of the boy (ie lack of remorse);
- over average age for the given school grade (reflecting low achievement and being held back a grade);
- hyperactivity problems;
- a depressed mood; and
- the mother's use of physical punishment (Farrington et al. 2001).

In a Dutch study, Van de Rakt, Nieuwbeerta and De Graaf (2008) analysed official data from the Criminal Career and Life Course Study. Criminal histories were obtained for 4,271 men, supplemented with population registration data collected across their life course up to 2003. These data were compared with data collected for a matched control group of 'never convicted' men and

compared with the criminal histories of each group's offspring.

The results confirmed that the number of convictions of the fathers related substantially to the number of convictions of his children, even after controlling for age and sex. Children whose fathers were more persistent and prolific in their offending had a higher chance of becoming persistent and prolific offenders themselves (Van de Rakt, Nieuwbeerta & De Graaf 2008).

### The mediating role of parenting

A key theme examined in the literature on intergenerational continuity in offending and other problematic behaviour is the mediating role played by parenting.

Using data from the US Rochester Youth Intergenerational Study, Thornberry, Freeman-Gallant and Lovegrove (2009) examined the extent to which parenting behaviours mediate the influence of a parent's adolescent antisocial behaviour on their child's antisocial behaviour.

In the Thornberry et al. (2009) study, effective parenting was a composite measure of affective ties to the child, monitoring/supervision (eg how often the parent knows where their child is) and consistency of discipline.

They found a significant correlation for mothers (Pearson's  $r=0.32$ ;  $p<0.001$ ) and for high-contact fathers who lived with or saw their child weekly (Pearson's  $r=0.21$ ;  $p<0.01$ ). For low-contact fathers, however, the correlation was quite small (Pearson's  $r=0.05$  and not statistically significant). The mediational model for mothers differed from that of high-contact fathers. For mothers, effective parenting was the only variable that had a direct effect on the child's antisocial behaviour. The impact of the mother's prior adolescent antisocial behaviour was, therefore, mediated by her style of parenting.

By contrast, for high-contact fathers, there were multiple paths that mediated the impact of the father's prior adolescent antisocial behaviour on the child's subsequent behaviour. Adolescent drug use and delinquency among high-contact fathers reduced the age at which they had

their first child, increased parenting stress and reduced effective parenting behaviours. Both age at first birth and parenting style had direct effects on the child's antisocial behaviour (Thornberry, Freeman-Gallant & Lovegrove 2009).

McCord (1991) compared the socialisation practices of families where the fathers had a criminal record with families where the fathers did not have a criminal record. She found criminal fathers had a greater likelihood of being alcoholic, aggressive, punitive and absent. Parental conflict was also more likely to be present in these families and the biological mothers were also more likely to be aggressive.

Interestingly, families of fathers with criminal records were no more likely than the families of non-criminal fathers to live in the 'worst' neighbourhoods. Living in unstable neighbourhoods only appeared to have a criminogenic effect on sons with a criminal father.

Mothers appeared to be particularly influential in determining whether the sons of fathers with criminal records engaged in (and were convicted of) criminal offences themselves. Provision of maternal affection, maternal self-confidence and the consistent application of non-punitive discipline or supervision apparently helped to protect sons from the criminogenic influences of fathers with a criminal record (McCord 1991).

In summary, the existent international literature reveals evidence of an intergenerational transfer effect between parents with criminal histories and their offspring, with the criminality of the father being particularly influential. The intergenerational transfer of criminality can be mediated by parenting practices and mothers may play a key role in this regard, potentially having a protective influence on the transfer of criminality from fathers to their children.

### Explaining the intergenerational transmission of criminality

Farrington et al. (2001) identify six possible explanations (which are not mutually exclusive) for the intergenerational transmission of criminality:

- Each successive generation may be exposed to multiple risk factors such as poverty, disrupted families, single and teenage parenting, and living in the most deprived neighbourhoods.
- Assortative mating—the tendency of male offenders to cohabit with, or marry, female offenders was evident in both the Pittsburgh Youth Study and the Cambridge Study (Farrington et al. 2001). Male offenders may form relationships with female offenders as a result of social proximity (ie they live in the same areas and/or frequent the same social outlets) or because they select mates who have similar characteristics to themselves.
- Offending may be concentrated in families because children model their behaviour on their parents or siblings, or because they are actively recruited into crime by their parents or siblings. While the Cambridge study provided some evidence of co-offending among siblings, there was no evidence that parents directly encouraged their children to commit crimes; in fact, fathers disapproved of their son's offending (Rowe & Farrington 1997).
- Criminal parents may have some genetic predisposition towards criminal behaviour which is transmitted to their children. Moffitt (2005) reviewed over 100 quantitative studies of antisocial behaviour and concluded that genes account for about half of the population variance in antisocial behaviour. Efforts to identify potential sources of genetic risk are proving fruitful. Using data derived from the National Longitudinal Study of Adolescent Health, De Lisi et al. (2009) found that for African-American females, genetic risk (comprising a polymorphism in the DRD2 gene) and a criminal father interacted to predict serious and violent delinquency and number of police contacts.
- The effect of a parent with a criminal history on a child's propensity to offend may be exacerbated by environmental influences, such as poor parental supervision, large family size, harsh and inconsistent discipline and living in a neighbourhood with a high crime rate and/or a high level of socioeconomic disadvantage.

- 'Criminal' families may be more closely monitored by criminal justice agencies and social services, with the result that any transgressions are more likely to come to official attention than would be the case for other families who are not known to the police and therefore unlikely to be subject to any official bias.

Van De Rakt, Nieuwebeerta and Apel (2009) note that the process of labelling has also been suggested as a possible influence, whereby the offspring of criminal fathers are more likely to perceive themselves as criminals and this ultimately becomes a 'self-fulfilling prophecy' resulting in the commission of crime.

### Current study

The concentration of offending in 16 multi-problem families in Tasmania was examined by psychiatrist Dr Eric Cunningham Dax in the early 1970s. The families had all been residents of Hobart or nearby for at least two generations (Dax 1983; Davies & Dax 1974). It was found that 50 percent of the second generation family members had a police record (73% of the males, 17% of the females) and 34 percent had been to prison (51% of the males, 9% of the females).

The current study is intended to build on the research undertaken by Dax and collaborators by using contemporary analytic techniques to explore the intergenerational transmission of criminality among six known criminal families in Tasmania. The focus of the study is primarily on further investigation of parental gender and offending in influencing the transmission of criminality to the next generation. However, the impact of the seriousness of parents' criminal records is also explored.

### Methodology

This study primarily involved data collection within a number of state government agencies to develop a profile of six extended families with an offending history spanning several generations.

The six families eventually selected were all based predominantly in southern Tasmania and were well known to criminal justice

professionals. It is not known whether the six families in the current study were related to the 16 multi-problem families in Dax's study.

A total of 714 family members were initially identified. The intimate partners of biological family members were included where offspring resulted from the union. Biological children were included, but not step-children due to the difficulty of identifying step-children through official records, particularly when some family members have had multiple short-term relationships.

Conviction records were sourced for court appearances resulting in a conviction. All offences were included, including traffic offences. For each court appearance, the most serious offence was counted based on the ABS National Offence Index (ABS 2003). The conviction history of each family member included in the analysis was then coded according to whether or not the individual had:

- no criminal record;
- a criminal record for non-serious offences; or
- a criminal record for serious offences.

'Serious offence' was defined in accordance with the definition contained in the *Forensic Procedures Act 2000* (Tas). This definition incorporates indictable offences, some drug offences and some offences contained in the *Police Offences Act 1935* including motor vehicle theft, offences against police, unlawfully destroy or injure property, unlawful possession and common assault.

### Data analysis

Data analysis was undertaken as a two step process:

- an exploratory data analysis phase to obtain a general, descriptive insight into the main features of the data set; and
- a modelling and analysis phase to investigate in a more intensive manner the key causal relationships and their practical and statistical significance.

The exploratory data analysis involved reviewing the initial data set (n=714) for cases where there was no information on the criminal records of the father or

the mother (this resulted in 257 case deletions; this did not mean the relevant parent did or did not have a criminal record, only that such information was not known) and for persons under the age of criminal responsibility (10 years of age in Tasmania, resulting in a further 144 case deletions).

This resulted in an active sample of 313 persons, of which 160 (51.1%) were males and 153 (48.9%) were females. Categorised by family—51 cases (16.3%) were in Family 1; 21 cases (6.7%) were in Family 2; 114 cases (36.4%) were in Family 3; 48 cases (15.3%) were in Family 4; 57 cases (18.2%) were in Family 5; and 22 cases (7%) were in Family 6.

When examined in terms of the criminal records of the individuals concerned, the exploratory data analysis found in 120 cases (38.3%) the person had no criminal record, 34 individuals (10.9%) had records for minor offences and 159 individuals (50.8%) had records for serious offences.

When disaggregated by gender, 51 males (16.3% of all persons) had no criminal record, 10 males (3.2%) had a criminal record for minor offences and 99 males (31.6%) had a criminal record for serious offences. For females, the figures were 69 (22%), 24 (7.7%) and 60 (19.2%) respectively.

A statistical analysis found males were statistically significantly less likely than would have been expected to have no criminal record and more likely to have a criminal record for serious offences. In contrast, females were statistically significantly more likely than would have been expected to have no criminal record and less likely than expected to have had a serious criminal record ( $\chi^2=17.89$ ;  $p=0.000$ ). This result should not be wholly unexpected, given males are generally more likely than females to commit crimes.

When comparing members of the six families, members of Families 1, 2, 4 and 6 were slightly more likely to have had records for serious criminal offences, whereas members of Families 3 and 5 were slightly less likely to have had such criminal records. However, these differences were only slight and were not statistically significant ( $\chi^2=12.1$ ;  $p=0.277$ ).

## Modelling

The second phase of the data analysis involved using probability (in this case, logit/probit) modelling techniques to test the intergenerational transfer of criminal tendencies within families identified for their history of prior criminal behaviour.

This modelling was undertaken in two sweeps—the first (using binary logit/probit modelling) sought to estimate the probability of an individual not having or having a criminal record based on a range of demographic and criminological characteristics. These characteristics were—the person's gender (coded 0 if male; 1 if female), each parent's individual criminal history, whether the father had a criminal record (0 if no; 1 if yes), whether the mother had a criminal record (0 if no; 1 if yes), whether neither, one or the other, or both parents had a criminal record (a combination of the father's and mother's criminal records) and family of origin.

This design was subsequently modified from a binary to multinomial logit/probit modelling using 'prior criminal record' as the dependant variable (constructed to distinguish between 'no criminal record', 'history of minor offences' and 'history of serious criminal offences').

Initial modelling showed a parent's prior criminal record for minor offences had no statistically significant effect on the likelihood of their children having a criminal record and there was no statistically significant difference between the families in their likelihood of transmitting criminal tendencies to subsequent generations. Thus, family

membership was dropped from further modelling.

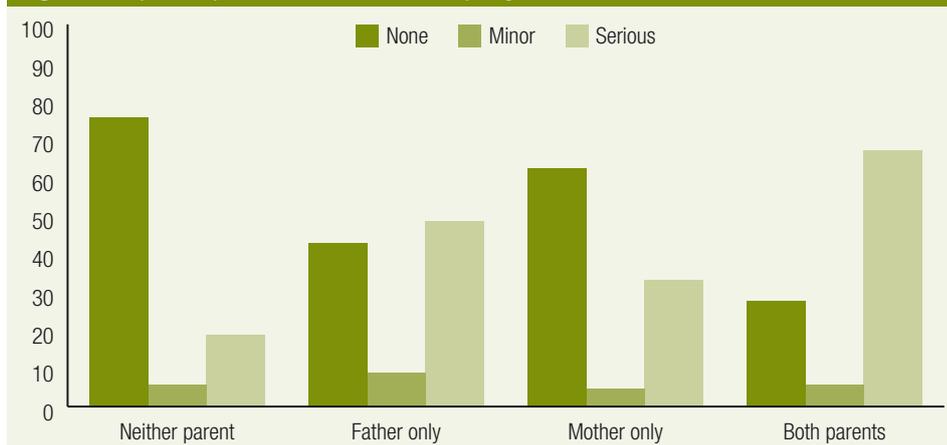
The main results from the modelling (reported as probabilities) are summarised in Figures 1 (for males) and 2 (for females).

For both genders, the general pattern appears much the same—the more serious the parent's criminal record, the greater the probability of their offspring subsequently committing offences, with the influence of the father's record seemingly being greater than that of the mother.

Figure 1 provides the expected probabilities for male offspring (ie sons) and focuses on whether their parents had criminal records. Where neither parent had a criminal record, there was a 75.6 percent probability their male offspring would have no criminal record, although there was an 18.7 percent probability their male offspring would have a criminal record for serious criminal offences. However, where the son had a father with a criminal record but a mother with no record, the probability of the son having a criminal record for serious offences increased by almost 30 percentage points to 48.5 percent. These estimates do not take into account other familial influences, such as siblings, cousins, aunts and/or uncles, which could be either positive or negative; such work is a worthy topic for further research.

By contrast, where a son had a father without a criminal record but a mother who had committed crimes in the past, the probability of the son having a criminal record for serious offences rose to 33 percent (an increase of 14.3 percentage points),

**Figure 1** Expected probabilities for male offspring



**Figure 2** Expected probabilities for female offspring



suggesting the impact of a father’s criminal past is approximately double that of a mother’s criminal record on a son’s subsequent offending.

If both parents have criminal records, then the probability of the son having a serious criminal record was almost 67 percent, well above that for either parent individually, pointing to a substantial multiplier-interaction effect between the parents.

The results for female children are generally similar to males in their broad patterns, although the individual probabilities are lower for each parental-crime profile.

Where neither parent had a criminal record, the probability of their daughter having no criminal record was 80.5 percent and the probability of her having a criminal record for a serious offence was only 8.7 percent—a better outcome than that of the boys, which perhaps represents young males’ greater involvement in crime generally.

Where there was a father with a criminal record and a mother without a criminal record, the probability of the daughter having no criminal record dropped to 53.7 percent, while the probability she would have a criminal record for a serious offence jumped to 26.7 percent (more than treble the rate where both parents did not have criminal records). If the daughter had a father without a criminal record and a mother with a criminal record, these probabilities were 73.1 percent and 17 percent respectively.

If both the parents had criminal records, there was a 43.8 percent probability the daughter would have a criminal record for

a serious offence (although this was still substantially below the 66.9 percent probability for males for whom both parents had criminal records).

Taken as a whole, these probabilities paint a general picture that, as might be expected, the worst case scenario for a young person in terms of future criminal behaviour is where both parents have criminal histories of their own and the best case scenario is where neither parent has a criminal record. However, the analysis also suggests a father with a criminal past and a ‘cleanskin’ mother (no criminal record) are more likely to have a greater adverse influence on sons and daughters than families where the father has no record and the mother has offended. The dynamics of how a parent without a criminal record moderates the impact of a parent with a criminal history warrants further research.

### Conclusion

Consistent with the Cambridge Study and the Pittsburgh Youth Study, the results from this Tasmanian study suggest that the children of parents with a criminal record have a much greater likelihood of becoming involved in crime themselves than the children of parents who do not have a criminal record.

In this study, a child born into a family where neither parent has a criminal record had a very high probability (around 76% for sons and more than 80% for daughters) of not having a criminal record. However, a child born into a family where both parents had a criminal record had a fairly low probability of escaping a criminal record (27.5% for

sons; 41.1% for daughters) and the child was more likely to obtain a criminal record for a serious offence (66.9% for sons; 43.8% for daughters).

These probabilities are likely to be an underestimate of the likelihood that the offspring of criminal parents in the study will have a criminal record for a serious offence.

Official records are known to substantially underestimate the true level of offending over the life course (Soothill, Fitzpatrick & Francis 2009) and the reliance on court appearances does not account for younger family members who may have been the subject of diversionary proceedings (ie informal cautions, formal cautions and community conferences).

However, the results of this study extend beyond those in the existing literature in a number of ways. The major contribution of this study is to explore the role of gender in the intergenerational transfer of criminality by examining the influence of maternal criminality in addition to paternal criminality and by examining whether the influence of parental criminality varies according to the gender of the offspring (children).

The current study population differs to previous studies because it focuses on known criminal families (ie families with a known history of intergenerational offending over at least 3 generations) rather than ‘at risk’ youth samples or first generation offenders. Further, the impact of offence seriousness and the impact of offending continuity across the generations is explored. It is demonstrated that the offspring of parents with a conviction for a serious offence are at a much higher risk of subsequent involvement in serious crime.

The main policy implication from this study is not new—the children of criminal parents are at greater risk of offending, particularly when there is a significant offence history and serious offences have been committed. This suggests that some form of intervention specifically targeting these families is needed to break the cycle of crime.

There is evidence that a gene–environment interaction is at play in the intergenerational transmission of offending, most recently

Dr Vanessa Goodwin was Project Manager, Corporate Services with the Tasmanian Department of Police and Emergency Management and postdoctoral fellow with the Tasmanian Institute of Law Enforcement Studies at the University of Tasmania.

Dr Brent Davis is Research Manager, Modelling and Forecasting with the Australian Institute of Criminology

General editor, *Trends & issues in crime and criminal justice* series:  
Dr Adam M Tomison, Director,  
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© Australian Institute of Criminology 2011  
GPO Box 2944  
Canberra ACT 2601, Australia  
Tel: 02 6260 9200  
Fax: 02 6260 9299

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illustrated by the research findings of De Lisi et al. (2009). However, there is also evidence that a low-risk environment may moderate a genetic predisposition to crime (Soothill, Fitzpatrick & Francis 2009). Intervention programs that target criminal parents with the aim of improving parenting practices and family functioning, and that work to increase the resilience of children appear to offer the most promise in addressing child and family environmental risk factors (Farrington et al. 2001).

There are effective family-based intervention program models in Australia that could be targeted towards known crime families. One such program is the Intensive Supervision Program operating in Western Australia, targeting both parents and children. This program utilises the intensive family-based multisystemic therapy treatment model that was originally developed in the United States to treat serious juvenile offenders (Schoenwald et al. 2008).

Similarly, the Family Independence Program that formed part of the Pathways to Prevention project implemented in Queensland is likely to reduce the risk of criminal behaviour (see Homel et al. 2006). Both program models involve a range of intensive interventions tailored towards the needs of each family, small caseloads and longer intervention periods.

As noted above, it is important when developing interventions to prevent criminal behaviour that care is taken not to label the children as 'offenders' or 'criminals' and to address such perceptions the children may have already developed, if a program is to be successful in reducing the risk of the intergenerational risk of offending.

Finally, several important questions still remain, partly reflecting the research design of this study. The data analyses and modelling focused on two demographic variables (gender and family membership) and one criminological variable (criminal history of individuals and their parents). To keep the study tractable, other demographic and criminological variables, such as the criminal records of siblings and/or of spouse(s), age of person at first court appearance (where they have a criminal record), the charged offence at first appearance, the penalty imposed and the count of convictions were excluded. Such characteristics could usefully be included in further research into the impact of living in a family where there is strong intergenerational criminal behaviour.

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