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## Gender differences in risk factors for offending

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This paper draws together the key findings of research on whether the risk factors for offending differ for males and females. The brothers and sisters of the males in the Cambridge Study in Delinquent Development were investigated. This is a longitudinal survey of the development of offending and antisocial behaviour in 411 males who were first contacted in 1961–62. The research examined how effective risk factors were in predicting the offending of these brothers and sisters. It also looked at gender differences in risk factors and their implications for preventative intervention techniques.

### Key points

- The prevalence of convictions for criminal offences was much higher for brothers (at 44%) than for sisters (12%).
- The type of offence varied between brothers and sisters. Burglary and theft of vehicles were more prevalent for brothers; shoplifting and deception offences for sisters.
- Offending tended to be concentrated in certain families and the probability of a child being convicted increased with the number of other convicted children in a family.
- Although important risk factors for brothers and sisters were similar, there were some gender differences. For example, socio-economic and child-rearing factors (such as low family income and poor parental supervision) were more important for sisters, and parental characteristics (such as nervous fathers and mothers) were more predictive of offending for brothers.
- Risk scores predicted offending more accurately for sisters than for brothers. For example, in predicting early onset offending, the proportion of sisters convicted increased from 2% of those with no risk factors to 21% of those with 4–5 risk factors compared with an increase from 9% to 40% for brothers.

The main aims of this research were to:

- investigate similarities and differences in risk factors for offending (as measured by convictions) of boys and girls
- compare criminal careers of males and females in the same families.

few large-scale community-based surveys where risk factors for offending by boys and girls have been compared. By comparing boys and girls in the same families, many other influences on offending such as those of neighbourhood and community are controlled.

The main focus is on socio-economic, family and child-rearing risk factors. There have been very

**The views expressed in these findings are those of the authors, not necessarily those of the Home Office (nor do they reflect Government policy)**

### The Cambridge Study

This research analyses data collected in the Cambridge Study in Delinquent Development, which is a prospective longitudinal survey of 411 males. They were first contacted in 1961–62 and were living in an inner-city area of South London. The sample was chosen by taking all the boys who were then aged 8–9 (most were born in 1953) and on the registers of six state primary schools within a one-mile radius of a research office which had been established. For a summary of the work of the Cambridge Study see Farrington, 2003.

Many previous analyses have been carried out on childhood risk factors for offending by these boys but for the first time in this study, childhood risk factors for offending by the boys' brothers and sisters have been analysed and compared with those obtained for the boys themselves. Only one previous study in the US (Rowe et al., 1995) has compared risk factors for offending by brothers and sisters.

### Criminal careers

The analyses are based on 397 families containing:

- 397 study males
- 494 brothers
- 519 sisters.

The main comparisons given here are between brothers and sisters of the study males because there is far more information about both risk factors and offending for the study males. These results relate to offending up to 1994. As shown in Table 1, the prevalence of convictions for criminal offences was much higher for brothers at 44% than for sisters at 12%. Also, brothers committed offences more frequently – an average of 4.3 per offender.

**Table 1 Comparison between brothers and sisters in offending**

	Brothers	Sisters
Convictions for criminal offences	44%	12%
Average number of convictions	4.3	2.8
Average age of offending (years)	21.7	21.5
Average age of onset of offending	18.5	19.9
Average age of last conviction	25.1	24.3

The type of offence varied between brothers and sisters.

Brothers disproportionately committed:

- burglary (20% of brothers' offences; 6% of sisters' offences)
- theft of vehicles (13% of brothers' offences; 4% of sisters' offences).

Sisters disproportionately committed:

- shoplifting (28% of sisters' offences; 6% of brothers' offences)
- deception offences (27% of sisters' offences; 12% of brothers' offences).

Although brothers and sisters were similar in average ages of offending and in average ages of onset and desistance, sisters had shorter criminal careers (an average of 4.4 years compared with 6.6 for brothers).

Offending tended to be concentrated in certain families and the probability of a child being convicted increased with the number of other convicted children in a family (Table 2). It should be noted that these boys and girls were growing up during the 1960s and 1970s, when conditions were very different from today, and that offending is measured according to convictions. However, risk factors for offending are generally replicable over time and place and risk factors for official and self-reported offending are generally similar.

**Table 2 Proportion of families with convicted siblings by number of convicted brothers and sisters in the family**

No. of convicted brothers in the family	Total	% Study boys convicted	% Sister convicted
No brothers in family	153	33	7
None convicted	112	27	7
1 convicted	81	47	21
2 convicted	29	66	25
3–6 convicted	22	82	47
Total families	397		

  

No. of convicted sisters in the family	Total	% Study boys convicted	% Brother convicted
No sisters in family	117	33	42
None convicted	236	38	52
1 convicted	30	50	75
2–4 convicted	14	86	100
Total families	397		

### Gender differences in risk factors for offending

Most longitudinal research on risk factors for offending has concentrated on males because they commit most of the serious predatory and violent offences. This has resulted in gaps in the understanding of male versus female offending. Increased knowledge may help the development of differential preventative strategies, especially those based on targeting risk factors.

The risk factors for offending early (onset of offending before 17 years) and those for frequent offending (four or more convictions for brothers, two or more convictions for sisters) were studied. In general, the most important risk factors for both were similar for brothers and sisters:

- low family income
- large family size
- attending a high delinquency rate school

- a convicted father
- a convicted mother
- a delinquent sibling
- parental conflict
- separation from a parent
- harsh or erratic parental discipline
- poor parental supervision.

Although important risk factors for brothers and sisters were similar, there were some gender differences.

#### Factors predicting offending more strongly for sisters

Socio-economic risk factors such as:

- low social class
- low family income
- poor housing.

Child-rearing risk factors such as:

- low praise by the parents
- harsh or erratic discipline
- poor parental supervision
- parental conflict
- low parental interest in education
- low paternal interest in the children.

#### Factors predicting offending more strongly for brothers

Parental risk factors such as:

- nervous fathers and mothers
- poorly educated fathers and mothers.

Convicted fathers and mothers were equally important predictors for brothers and sisters. There was no tendency for mother risk factors to be more important for sisters and father risk factors to be more important for brothers.

#### Gender differences in predictive accuracy

In general, risk factors were better predictors of the offending behaviour of sisters than brothers, even after controlling for other factors. For example, for early onset offending, depending on the absence or presence of low family income, the percentage of sisters convicted increased from 1% to 11%, whereas the percentage for brothers only increased from 14% to 33%. Whilst the absolute percentage difference was greater for brothers, the proportional increase (which is a better index of the likely causal effect) was much greater for sisters.

Similarly, risk scores appear to predict offending more accurately for females than males. In predicting early onset offending, the percentage of sisters convicted increased from

#### Risk scores

Five variables – low family income, large family size, a convicted parent, separation from a parent and poor parental supervision – were used to create a risk score. Each factor was given a weight of one and risk scores were calculated according to how many of the five factors were present for each brother or sister.

**Table 3 Points risk scores versus early onset of offending**

Risk score	No.	% convicted
<b>Brothers</b>		
0	138	9
1	88	13
2	98	20
3	80	35
4–5	90	40
Total	494	
<b>Sisters</b>		
0	152	2
1	107	1
2	123	2
3	70	4
4–5	67	21
Total	519	

2% of those with no risk factors to 21% of those with 4–5 risk factors while for the boys the increase was from 9% of those with no risk factors to 40% of those with 4–5 risk factors (Table 3).

#### Risk assessment

The fact that convicted sisters were a smaller fraction of the cohort (12%) and therefore a more extreme and distinctive group than convicted brothers (44%) accounted for part of the gender difference in predictive accuracy, but not for all of it. The 63 convicted sisters were compared with 66 brothers who had four or more convictions (the 'frequent' offenders). There were still marked differences in the predictability of different risk factors. Socio-economic and child-rearing factors were still more important for sisters and parental characteristics were still more important for brothers.

The present analyses suggest that risk assessment using family factors is likely to be more accurate for females than for males. In this research, the comparison of high and low risk sisters versus high and low risk brothers suggests that risk assessment devices can predict more effectively among females than among males.

#### Risk-focussed prevention

Past research shows that family-based prevention techniques targeting risk factors can be effective in reducing offending (Farrington, 2002). The stronger effect of risk factors for sisters compared with brothers has important implications for risk-focussed prevention of offending for females. The risk factor of 'low family income' can be used as an illustration:

- 22% of sisters from low income families were convicted (at any age) compared with 6% from higher income families
- 54% of brothers from low income families were convicted (at any age) compared with 37% from higher income families.

### An illustration of how risk-focussed prevention can affect early onset offending

If an assumption is made that all those at high risk (scores of 4–5) could be changed into low risk (scores of 0–3) through risk-focussed prevention, the results could be as follows. The 90 brothers with high risk scores would then have an early onset rate of 18% instead of 40% (an estimated 16 would have an early conviction instead of 36). For the 67 sisters with high risk scores they could have an early onset rate reduced from 21% to 2% (only one would have an early conviction instead of 14). This assumption about the effect of risk-focussed prevention suggests that it would cause a much greater proportional reduction in female offending (54% compared with 19% in males) but there would be a greater absolute reduction in male offending (20 compared with 13).

This amounted to two-thirds of convicted sisters being from low income families compared with half of convicted brothers. These sorts of gender differences in the importance of factors could be taken into account when risk-focussed prevention techniques are chosen.

The present analyses suggest that parent training and parent education techniques, which target parental discipline, parental supervision, parental reinforcement of children (e.g. praising) and parental interest in children are likely to have proportionally more impact in reducing female offending than in reducing male offending (especially early onset offending). Similarly, interventions designed to reduce family poverty are likely to have proportionally more impact in reducing female offending. However, the absolute number of offences reduced is likely

to be greater for males than for females due to the higher prevalence of male offending.

### Conclusions

It is difficult to draw simple conclusions about causal influences from results obtained with risk factors and it should be borne in mind that this research is based on risk factors for convictions. Furthermore this project does not explain why females are less likely to offend than males, commit different types of offences and have shorter criminal careers.

New theories about gender differences in offending are needed which might help explain the results from this study. Existing theories do not predict that socio-economic and child-rearing factors are more important for females, that parental characteristics are more important for males and that criminal parents are equally important for both males and females. New theories should be tested using a longitudinal survey.

Interventions designed to reduce offending should be based on the best possible information about risk factors. Information about gender differences has been inadequate and it is hoped that the knowledge gained about these in this study will assist in implementing more effective gender-specific intervention techniques.

### Methodological note

In 1994 a search was carried out at what was then the National Identification Bureau and all convictions for indictable and standard list offences were recorded. At that stage of the Cambridge Study the males and their brothers and sisters had an average age of 40. Any criminal records for brothers and sisters were compared with those of the study males. Risk factors were compiled from data collected 30 years before when the study males were aged 8–10 years.

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For a more detailed report see *Gender differences in offending: implications for risk-focused prevention* by David P. Farrington and Kate A. Painter. (2003). Home Office RDS Online Report OLR09/04 available on the Home Office RDS website <http://www.homeoffice.gov.uk/rds/onlinepubs1.html>

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