Intergenerational Transmission of Convictions: 
Family Factors as Mediators

Bomin Lee
University of Cambridge
Institute of Criminology
Lucy Cavendish College

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This dissertation is submitted for the degree of Doctor of Philosophy in Criminology
Declarations

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the preface and specified in the text. I further state that no substantial part of my thesis has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. It does not exceed the prescribed word limit for the Degree Committee of the Faculty of Law.
Abstract

Bomin Lee

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**Aims:** To investigate the extent to which criminal conviction in one family generation predicts conviction in the next generation, and to identify possible factors and processes underlying both intergenerational continuity and discontinuity in convictions, with a focus, primarily, on family-related factors.

**Methods:** Both quantitative and qualitative methods were used based on data from the Cambridge Study in Delinquent Development (CSDD). Chi-square tests and logistic regression analyses were used to establish the strength of intergenerational transmission of convictions across three generations and to identify childhood risk factors as possible mediators of this transmission. Based on qualitative prospective in-depth interviews, the case histories of eight CSDD men and their family members across three generations were presented to provide a picture of the complexity of factors and associated mechanisms underlying both intergenerational continuity and discontinuity of criminal behaviour.

**Results:** I found evidence for the intergenerational transmission of convictions from G1 to G2 and from G2 to G3. Maternal transmission of convictions to children seems to be the strongest in most instances, irrespective of children’s gender. Evidence for some increased risk of convictions from G1 grandfathers to G3 grandsons and from G1 grandmothers and to G3 granddaughters was also found. The degree of intergenerational transmission of convictions decreased after controlling for family, socio-economic, and individual risk factors, but some risk factors that were important mediators for both G2 and G3 generations were related to the family home environments during childhood (such as poor parental supervision, parental separation, large family size, and low family income). Based on the life stories of the eight CSDD men, adequate parental supervision and monitoring, good relationships with parents,
parental involvement in education, and high education attainments might act as protective factors, preventing some children from following in the footsteps of their criminal parents.

**Conclusions:** In keeping with Farrington’s first two mechanisms involving risk factors, the intergenerational transmission of convictions could be at least partially mediated by negative family environmental factors and/or due to a constellation of adverse childhood family features which facilitated a number of antisocial and deviant behaviours, including criminal behaviour. There is some evidence that family environmental influences play an important role in the intergenerational transmission of convictions, although I cannot rule out the possibility of genetic influences.

**Keywords:** convictions, intergenerational continuity, intergenerational discontinuity, family factors, mediators, risk factors, case histories, environmental influences
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# Table of Contents

Declarations

Abstract

Acknowledgements

Chapter 1. Introduction .................................................................................................................. 10

Chapter 2. Literature Review ........................................................................................................ 15
  2.1. The Familial Concentration and Transmission of Crime ................................................. 15
  2.2. Theoretical Explanations for the Transmission of Crime .................................................. 18
    2.2.1. Environmental Explanations ......................................................................................... 19
    2.2.2. Biological or Genetic Explanations ................................................................................ 22
    2.2.3. Gene-Environmental Explanations .............................................................................. 23
    2.2.4. Thornberry’s Intergenerational Model of Antisocial Behaviour ................................. 25
  2.3. The Existing Literature on Intergenerational Transmission of Crime .............................. 26
    2.3.1. Multigenerational Research ......................................................................................... 27
      - Cambridge Study in Delinquent Development (CSDD) ...................................................... 27
      - Rochester Youth Development (RYD) ................................................................................ 28
      - Pittsburgh Youth Study (PYS) ............................................................................................ 29
      - Ohio Life-Course Study (OLS) .......................................................................................... 30
      - Oregon Youth Study (OYS) ............................................................................................... 30
      - Criminal Career and Life-Course Study (CCLS) ............................................................... 30
      - Transfive Study .................................................................................................................... 31
    2.3.2. Population-based Studies .............................................................................................. 31
  2.4. Research on Possible Mechanisms of Intergenerational Transmission of Crime .......... 33
    2.4.1. Mediating Mechanisms ............................................................................................... 33
    2.4.2. Moderating Mechanisms ............................................................................................. 36
      - Gender of Parents and Children ........................................................................................ 37
      - Timing and Frequency of Parental Offending ..................................................................... 39
      - The Presence of Fathers in the Home ................................................................................ 40
2.5. Limitations of Previous Research ................................................................. 43
2.6. The Current Dissertation .............................................................................. 45

Chapter 3. Methodology ......................................................................................... 59
3.1. A Description of the Cambridge Study in Delinquent Development (CSDD) .... 59
   3.1.1. Participants ............................................................................................... 59
   3.1.2. Procedure ............................................................................................... 60
   3.1.3. Mesures .................................................................................................. 62
3.2. Mixed Methods Research .............................................................................. 63
3.3. Qualitative Case Study Research ................................................................. 65
3.4. Plan of Analyses ............................................................................................ 68
   3.3.1. Qualitative Case History Analyses ......................................................... 68
   3.3.2. Quantitative Statistical Analyses ............................................................ 71

Chapter 4. A Case Study-Based Investigation of Intergenerational Transmission of Criminal Behaviour in Three Generations of the Eight Families from the Cambridge Study in Delinquent and Development (CSDD) ................................................................. 73
4.1. Case 781 Derek .............................................................................................. 73
4.2. Case 020 Simon ............................................................................................ 85
4.3. Case 732 Colling .......................................................................................... 96
4.4. Case 992 Jacob ........................................................................................... 106
4.5. Case 081 Roger ........................................................................................... 117
4.6. Case 813 Dean ........................................................................................... 127
4.7. Case 680 Calum .......................................................................................... 137
4.8. Case 104 Jasper .......................................................................................... 148
4.9. A Summary of the Case Histories of Eight CSDD Men and Their Family Members .. 159

Chapter 5. A Statistical Investigation of Intergenerational Transmission of Criminal Behaviour across Three Generations from the Cambridge Study in Delinquent and Development (CSDD) ......................................................................................... 161
5.1. Do G1 (generation 1) convictions predict G2 (generation 2) convictions (G1-G2)? ... 161
5.2. Does the G1-G2 relationship vary according to whether or not G2 was separated? .... 163
5.3. Do G2 (generation 2) convictions predict G3 (generation 3) convictions (G2-G3)? ... 168
5.4. Does the G2-G3 relationship vary according to whether or not G3 was separated from G2? .......................................................................................................................171
5.5. Do G1 (generation 1) convictions predict G3 (generation 3) convictions (G1-G3)? ... 181
5.6. Is the G1-G3 relationship significant when controlling for G2? ..........................185
5.7. Does having a convicted G1 predict convictions of G2 males when controlling for G1 risk factors for G2 male offending? Which risk factors make the G1-G2 relationship nonsignificant? .................................................................186

Chapter 6. Discussion .......................................................................................................213

6.1. Statistical Analyses ..................................................................................................213
6.2. Qualitative Case History Analyses .........................................................................220
6.3. The Overall Results of Quantitative and Qualitative Analyses ..............................227

Chapter 7. Conclusion .......................................................................................................233

References .......................................................................................................................237
List of Tables and Figures

Table 2.1. Overview of intergenerational transmission studies .................................................. 47
Table 3.1. Four categories depending on whether G1, G2, or G3 was convicted or not ............. 70
Table 4.1. A list of eight CSDD families .................................................................................. 73
Table 5.1.1. Prevalence of convictions up to age 32 for all G1 fathers, G1 mothers, and G2 sons ... 161
Table 5.1.2. Percentage of G2 males convicted, given convicted or unconvicted G1 males (G1M-G2M) ........................................................................................................... 162
Table 5.1.3. Percentage of G2 males convicted, given convicted or unconvicted G1 females (G1F-G2M) .................................................................................................................. 162
Table 5.2.1. Percentage of G2 males convicted, given convicted or unconvicted G1 males, and separated or unseparated G2 males from a G1 parent before age 10 (G1M-G2M) ........................................... 164
Table 5.2.2. Percentage of G2 males convicted, given convicted or unconvicted G1 females, and separated or unseparated G2 males from a G1 parent before age 10 (G1F-G2M) ..................... 165
Table 5.2.3. Separation from a parent as a possible moderator of convictions of G1 males and G1 females versus convictions of G2 males (G1-G2) .................................................................................. 167
Table 5.3.1. Prevalence of convictions up to age 32 for all G2 fathers, G2 mothers, and G3 sons ... 168
Table 5.3.2. Percentage of G3 males convicted, given convicted or unconvicted G2 males (G2M-G3M) .................................................................................................................. 169
Table 5.3.3. Percentage of G3 males convicted, given convicted or unconvicted G2 females (G2F-G3M) ................................................................................................................. 169
Table 5.3.4. Prevalence of convictions up to age 32 for all G2 fathers, G2 mothers, and G3 daughters ............................................................................................................................... 170
Table 5.3.5. Percentage of G3 females convicted, given convicted or unconvicted G2 males (G2M-G3F) .................................................................................................................. 170
Table 5.3.6. Percentage of G3 females convicted, given convicted or unconvicted G2 females (G2F-G3F) ................................................................................................................. 170
Table 5.4.1. Percentage of separation from a G2 father before age 15 for all G3 sons and G3 daughters ............................................................................................................................... 171
Table 5.4.2. Prevalence of convictions up to age 32 for all G2 fathers, G2 mothers, and G3 sons .... 172
Table 5.4.3. Percentage of G3 males convicted, given convicted or unconvicted G2 males, and separated or unseparated G3 males from a G2 father before age 15 (G2M-G3M) ................................................................. 173
Table 5.4.4. Percentage of G3 males convicted, given convicted or unconvicted G2 females, and separated or unseparated G3 males from a G2 father before age 15 (G2F-G3M) ........................................ 174
Table 5.4.5. Prevalence of convictions up to age 32 for all G2 fathers, G2 mothers, and G3 daughters ......................................................................................................................................................... 175
Table 5.4.6. Percentage of G3 females convicted, given convicted or unconvicted G2 males, and separated or unseparated G3 females from a G2 father before age 15 (G2M-G3F) ......................... 176
Table 5.4.7. Percentage of G3 females convicted, given convicted or unconvicted G2 females, and separated or unseparated G3 females from a G2 father before age 15 (G2F-G3F) ......................... 177
Table 5.4.8. Separation from a parent as a possible moderator of convictions of G2 males and G2 females versus convictions of G3 males (G1-G2M) ........................................................................................................... 179
Table 5.4.9. Separation from a parent as a possible moderator of convictions of G2 males and G2 females versus convictions of G3 females (G1-G2F) ........................................................................................................... 180
Table 5.5.1. Prevalence of convictions up to age 32 for all G1 grandfathers, G1 grandmothers, and G3 grandsons ............................................................................................................................................................ 181
Table 5.5.2. Percentage of G3 males convicted, given convicted or unconvicted G1 males (G1M-G3M) ......................................................................................................................................................... 182
Table 5.5.3. Percentage of G3 males convicted, given convicted or unconvicted G1 females (G1F-G3M) ......................................................................................................................................................... 182
Table 5.5.4. Prevalence of convictions up to age 32 for all G1 grandfathers, G1 grandmothers, and G3 granddaughters ......................................................................................................................................................... 183
Table 5.5.5. Percentage of G3 females convicted, given convicted or unconvicted G1 males (G1M-G3F) ......................................................................................................................................................... 183
Table 5.5.6. Percentage of G3 females convicted, given convicted or unconvicted G1 females (G1F-G3F) ......................................................................................................................................................... 183
Table 5.6.1. The effect of convictions of G1 males up to age 32 → convictions of G3 males up to age 32 when controlling for convictions of G2 males and G2 females up to age 32 ........................................ 184
Table 5.6.2. The effect of convictions of G1 males up to age 32 → convictions of G3 females up to age 32 when controlling for convictions of G2 males and G2 females up to age 32 ........................................ 185

8
Table 5.7.1. Percentage of G2 sons convicted, given convicted or unconvicted G1 parents (G1-G2M) ........................................................................................................................................................................... 187
Table 5.7.2. Possible mediators between convictions of G1 males and convictions of G2 males ...... 189
Table 5.7.3. Possible mediators between convictions of G1 females and convictions of G2 males ... 195
Table 5.8.1. Percentage of G3 sons convicted, given convicted or unconvicted G2 parents (G1-G3M) ........................................................................................................................................................................... 199
Table 5.8.2. Possible mediators between convictions of G2 males and convictions of G3 males ...... 201
Table 5.8.3. Possible mediators between convictions of G2 females and convictions of G3 males ... 206
Table 5.8.4. Possible mediators between convictions of G2 females and convictions of G3 females 210

Figure 1. The life course of Derek’s parents (G1-G2) (Case 781) .......................................................... 83
Figure 2. The life course of Derek’s children (G2-G3) (Case 781) .......................................................... 84
Figure 3. The life course of Simon’s parents (G1-G2) (Case 020) ........................................................... 94
Figure 4. The life course of Simon’s children (G2-G3) (Case 020) ....................................................... 95
Figure 5. The life course of Collin’s parents (G1-G2) (Case 732) ......................................................... 104
Figure 6. The life course of Collin’s children (G2-G3) (Case 732) ....................................................... 105
Figure 7. The life course of Jacob’s parents (G1-G2) (Case 992) ......................................................... 115
Figure 8. The life course of Jacob’s children (G2-G3) (Case 992) ....................................................... 116
Figure 9. The life course of Roger’s parents (G1-G2) (Case 081) ....................................................... 125
Figure 10. The life course of Roger’s children (G2-G3) (Case 081) ..................................................... 126
Figure 11. The life course of Dean’s parents (G1-G2) (Case 813) ....................................................... 135
Figure 12. The life course of Dean’s children (G2-G3) (Case 813) ....................................................... 136
Figure 13. The life course of Calum’s parents (G1-G2) (Case 680) ..................................................... 146
Figure 14. The life course of Calum’s children (G2-G3) (Case 680) ..................................................... 147
Figure 15. The life course of Jasper’s parents (G1-G2) (Case 104) ..................................................... 157
Figure 14. The life course of Jasper’s children (G2-G3) (Case 104) ..................................................... 158
Chapter 1

Introduction

Background

Without doubt, the family is one of the most important influences on child development and has been thought of as a crucial factor in the development of criminal behaviour (Loeber & Stouthamer-Loeber, 1986). A significant body of criminological research recognises the importance of the family in the development of criminal behaviour (Derzon, 2010; Farrington, 2010; Leschied et al., 2008; Lipsey & Derzon, 1998). Previous research highlights that the likelihood of an individual developing criminal behaviour increases with the presence of adverse risk factors that may occur within the family context. For instance, parental criminality, a large family size, childrearing problems (e.g., poor supervision and monitoring, low parental involvement), disrupted families, child abuse or neglect, and other parental and family characteristics (e.g., parents’ substance use, young parents, poor housing, low income) have been shown to predict an individual’s criminal behaviour. The strongest family factor predicting criminal behaviour that consistently emerges in the academic literature is parental criminal behaviour (Farrington, 2002; Stern & Smith, 1995). These findings highlight the importance of considering family factors, particularly criminal parents, in any attempt to understand the aetiology of criminal behaviour, since these factors are believed to reinforce and exacerbate antisocial and criminal behaviour.

Given the critical role that criminal parents play in the development of their children’s antisocial and criminal behaviour, the existence of an association between the criminal behaviour of parents and their children is well established within criminology (e.g., Farrington et al., 2001; Hagan & Palloni, 1990; Sampson & Laub, 1993; Thornberry et al., 2003). Many studies have shown evidence for intergenerational transmission of criminal behaviour: children of criminal parents have an increased risk of becoming criminals themselves (Farrington, 1993; Farrington et al., 2001; Huesmann et al., 1984; McCord, 1991). However, it should be pointed out that much of the evidence seeming to support this claim is found in studies that use small samples and retrospective designs. The problem with these studies is that they do not measure the proportions of children of criminal parents who did not
commit a crime, thus making it difficult to identify the mechanisms that may account for both intergenerational continuity and intergenerational discontinuity in criminal behaviour (Auty et al., 2017; Farrington et al., 2009; Kim et al., 2009; Tzoumakis et al., 2020; Van de Weijer et al., 2014). Therefore, in order to advance knowledge about intergenerational transmission of crime, there is a clear need for prospective longitudinal research to discover more information about factors and associated mechanisms that explain the link between intergenerational patterns of crime. Identifying these factors and mechanisms is essential to guide prevention and intervention efforts to reduce crime (Besemer, 2012).

Parental criminal behaviour has been shown to be associated with multiple risk factors, many of which are found in the family. It appears that criminal parents tend to have very low incomes, to live in deprived areas, to use physical punishment, to use harsh discipline, to be in conflict and to separate, to have poor relationships with their children; to have children at a younger age, and to have alcohol or drug problems (Farrington, 2015). For example, one study by Cassidy et al. (1996) found that antisocial mothers tended to be less responsive and passive toward their young children. Another study by Jaffee et al. (2004) showed that antisocial parents were about three times as more likely to abuse their children, compared to non-antisocial parents. As Thornberry (2009) noted, an individual’s criminal behaviour strongly influences their own development, transitions into adult roles, and parenting styles, thereby leading to negative outcomes in many areas of their life.

While many family factors have been linked to parental criminal behaviour, these factors have also been found to be associated with elevated offspring risk for criminal behaviour. For example, in the Cambridge Study in Delinquent Development (CSDD), harsh discipline, poor parental supervision, and parental conflict, measured at age 8, were significant predictors of later juvenile convictions and self-reported delinquency (West & Farrington, 1973). Similar results were obtained in the Rochester Youth Development Study (RYDS); child maltreatment under age 12 predicted later self-reported and official offending (Smith & Thornberry, 1995). (Derzon, 2010) reviewed the evidence of family factors as predictors of later antisocial behaviour and showed that childrearing skills, parental supervision, parental discord, low incomes, and family size, all measured at young ages, were the strongest predictors of later antisocial behaviour. Therefore, it is likely that the presence of any of these factors increases the risk of offspring developing criminal behaviour.
In addition, existing empirical studies have indicated that the association between parental criminality and offspring criminality may be at least partially due to the existence of some family-related factors. It appears that the strength of the intergenerational link in criminal behaviour may depend on particular family-related factors, such as poor parenting practices, family disruption, and low socio-economic status of the family (Conger et al., 1995; Kaplan & Liu, 1999a; Sampson & Laub, 1993; West & Farrington, 1977), suggesting that family-related factors are key to an understanding of such intergenerational links. For example, in the Cambridge Study in Delinquent Development (CSDD), Farrington and colleagues (2009) found that controlling for family risk factors reduced the degree of intergenerational transmission of convictions. Considering all of the evidence, there is no doubt that some family-related factors are at least as important intervening mechanisms for the process of intergenerational transmission of crime as are gender and ethnicity. This points to the need for a better understanding of the role that family-related factors play in the intergenerational transmission of criminal behaviour.

**Intergenerational transmission**

The term ‘intergenerational transmission’ (also called as intergenerational continuity) is broadly defined as “individual abilities, characteristics, behaviours, and outcomes” are transmitted from one generation to the next (Lochner, 2008:1). In the literature, the term ‘intergenerational transmission’ has therefore been used to refer to the similarity in some characteristics or behaviours between parents and children. Such transmission has been thought to take place only when parental behaviour precedes child behaviour. For Thornberry et al. (2003), intergenerational transmission focuses on the impact of a parent’s behaviour in the past on his or her child’s behaviour, while intragenerational transmission looks at the impact of a parent’s contemporaneous behaviour on his or her child’s behaviour. Although differences of opinion still exist, there appears to be some agreement that intergenerational transmission refers to the similarity in behaviour patterns between parents and children at similar developmental stages in life (Cairns et al., 1998), as this definition allows for more clarification of intergenerational patterns (Thornberry, 2009). Following this definition, my thesis will study the intergenerational transmission of criminal behaviour based on convictions up to the same age (i.e., 32) for all three generations. In my thesis, a strong relationship between criminal
parents and criminal children can be defined using odds ratios, with values greater than 2 indicating a significant association.

When discussing intergenerational transmission, the term “link” is occasionally used to refer the connection between one generation and the next, involving various forms of transmission, such as genetic and environmental factors. Therefore, the term “link” in relation to intergenerational transmission here refers to the mechanisms or factors that connect one generation to the next. Understanding these links can help understand the complex processes involved in the transmission of various factors from one generation to the next.

**Mediators and moderators**

It is necessary here to clarify what is meant by mediators and moderators in the relationship between parents’ and children’s conviction. For Baron and Kenny (1986), a mediator is the ‘generative mechanism through which the focal independent variable is able to influence the dependent variable of interest (p.1173). Parents’ conviction causes the mediator, which in turn causes children’s conviction. The mediator is therefore a variable that helps to explain the effect of parents’ conviction on children’s conviction. If parents’ conviction no longer predicts children’s conviction after controlling for a particular variable X, this is evidence that X is a mediator. Mediators may possibly be individual, parental, child-rearing, or socioeconomic factors, and they are chosen in my thesis based on knowledge about risk factors that contribute to children’s conviction (Farrington, 2015). A moderator is a variable that affects the direction and/or strength of the relationship between a predictor variable and an outcome variable (Baron & Kenny, 1986:1174). Based on the work of Baron and Kenny (1986), there are three possible paths to the outcome under investigation; (1) the proposed predictor; (2) the proposed moderator; and (3) the product of the predictor path and the moderator path. While there may also be significant main effects for both the predictor and moderator (Baron & Kenny, 1986:1174), if the path (3) is significant, then it suggests a moderator effect. I will follow the procedures set fourth by Baron and Kenny (1986) for examining possible mediators and moderators in the transmission of convictions across three generations.
Aims

My thesis aims to investigate the intergenerational transmission of criminal behaviour by analysing convictions of three successive generations in the Cambridge Study in Delinquent Development (CSDD). I incorporate data on the study males (G2), their parents (G1), and their children (G3) and aim to establish the extent to which convictions in one generation increase the likelihood of convictions in the next generation. I then examine possible factors that may explain intergenerational transmission of convictions, with a focus primarily on family-related factors. I also attempt to examine the importance of environmental influences by looking within families for sources of environmental influences. Both qualitative and quantitative methods are used in the analysis in an attempt to provide a greater range of insights into the intergenerational transmission of convictions. My thesis follows a case-study design, with in-depth examinations of family factors (e.g., parental supervision, family home environments, family size, parental separation or divorce, etc). It also aims to unravel the mechanisms underlying intergenerational discontinuity of convictions, as the qualitative case history approach enables me to identify unconvicted individuals of convicted parents and examine factors and processes that may have prevented these individuals from following in the footsteps of their criminal parents. While it is beyond the scope of my study to examine genetic influences, my thesis attempts to contribute to the understanding of intergenerational patterns of criminal behaviour, by focusing specifically on the family-related factors that may play a role in influencing the intergenerational patterns.
Chapter 2

Literature review of intergenerational transmission research

2.1. The familial concentration and transmission of crime

Over the past decades, researchers have shown an increased interest in the association between criminal behaviour of parents and their offspring, resulting in an accumulation of empirical evidence concerning crime concentration within families and issues around the transmission of offending (Farrington, 2010). On examining the concentration of crime in families, it appears that crime is highly familial in that a small percentage of families is responsible for the majority of crimes. For example, analyses of the Cambridge Study in Delinquent Development (CSDD) revealed that six per cent of the families accounted for half of all convictions (Farrington et al., 1996; Rowe & Farrington, 2006). Similarly, eight per cent of the families in the Pittsburgh Youth Study (PYS) were responsible for 43 per cent of all criminal arrests (Loeber et al., 2008). Research from the Netherlands also suggested that 52.3 per cent of all arrests were attributable to 7.8 per cent of all families (Junger et al., 2013).

Support for the concentration of crime in families is further provided by evidence on similarities in criminal behaviour between family members, especially between parents and between siblings. West and Farrington (1977) provided evidence for intragenerational transmission of crime between parents. Specifically, 61 per cent of fathers with convicted mothers were convicted themselves, compared to 23 per cent of fathers with unconvicted mothers. There is far more empirical evidence for sibling resemblances in criminal behaviour (Fagan & Najman, 2003; Haynie & McHugh, 2003; Lauritsen, 1993; Van de Rakt et al., 2009; Rowe et al., 1996). For example, Rowe et al. (1996) found statistically significant associations in self-reported delinquency between siblings. This intragenerational transmission of crime between parents and between siblings contributes to the concentration of crime within families.

In short, criminal behaviour of one family member is significantly related to criminal behaviour of every other family member (Farrington et al., 1996; Rowe & Farrington, 2006), thereby disproportionately increasing the number of crimes committed by certain families.

Not only does crime tend to concentrate within families, but there is also compelling evidence to suggest that crime is transmitted from generation to generation (Moffitt & Caspi,
Studies of intergenerational transmission that span three consecutive generations are rare in the empirical research literature (Besemer et al., 2017; Jolliffe et al., 2017), but the results consistently suggest that criminal behaviour in one generation increases the risk for criminal behaviour in the next generation. For example, juvenile delinquents are more likely to have antisocial parents and/or siblings. Empirical support for this was found by Farrington et al. (1996) in the Cambridge Study in Delinquent Development (CSDD), as they showed that convictions of fathers, mothers, brothers, and sisters all predicted a boy’s own convictions. Similar results were observed in the Pittsburgh Youth Study (PYS), in which arrests of fathers, mothers, brothers, sisters, uncles, aunts, and even grandfathers and grandmothers all predicted a boy’s own delinquency (Farrington et al., 2001). Among the biological relatives that have been found to predict child offending, the most important ones appear to be the parents themselves (Farrington et al., 2001). Many studies have shown that having a criminal parent (either father or mother) increases the risk that children will commit a crime (Farrington et al., 1975; McCord, 1977; Robins, 1966; Rowe & Farrington, 2006). For example, children of criminal fathers were approximately twice as likely to commit a crime as children with non-criminal fathers (Hjalmarsson & Lindquist, 2012; Kendler et al., 2015; Murray et al., 2007). Analyses reported by Farrington et al. (1975) and by West and Farrington (1977) showed that more than half (54%) of boys with convicted mothers were convicted themselves, compared with 23 per cent of those with unconvicted mothers. Giordano (2010) found that children with a criminal mother or father had a higher chance of becoming a criminal. A more recent work by Van Dijk et al. (2022) showed that children of organised crime offenders were three times more likely to be involved in crime themselves when compared with children in the control group. These findings clearly demonstrate the substantial influences of parental criminal behaviour on the offspring’s criminal development. In addition, a small body of available research has examined the intergenerational transmission of crime across three generations of the same family. Several studies have found evidence for intergenerational transmission of crime from grandparents to parents and from parents to children (Bailey et al., 2006; Farrington et al., 2009; Junger et al., 2013; Kim et al., 2009; Smith & Farrington, 2004; Thornberry, 2009; Thornberry et al., 2006). Bijleveld and Wijkman (2009) further provided evidence for intergenerational transmission of offending across five generations. Results from these studies consistently confirmed that criminal behaviour in one generation was replicated in the next generation. For example, using data in three generations, Farrington et al. (2009)
found strong resemblances in convictions between all generations of males, from grandfathers to fathers and from fathers to sons. These results, however, provided limited evidence for intergenerational continuity in crime from grandparents to grandchildren. Criminal behaviour of grandmothers and grandfathers appeared to somewhat increase the risk for criminal behaviour among grandchildren, but this relationship was not significant (Farrington et al., 2009; Smith & Farrington, 2004). Although these studies did not find significant direct relationships from grandparents to grandchildren, the results clearly showed an overall increased risk of criminal behaviour across three or more generations. A recent meta-analysis of intergenerational transmission of crime conducted by Besemer et al. (2017) concluded that, on average, children with criminal parents showed a higher risk for criminal behaviour, compared to children with non-criminal parents (pooled odds ratio=2.4). Furthermore, this result was held up after controlling for relevant covariates. Clearly, results from prior studies on the intergenerational transmission of criminal behaviour suggest that crime is transmitted across generations.

Although accumulating evidence exists to suggest that there is an intergenerational similarity in criminal behaviour across generations, empirical research has also shown that the magnitude of this similarity is not particularly large, although significant (Cairns et al., 1998; Hops et al., 2003; Robins et al., 1975). Some studies reported a significant correlation of 0.30 in criminal behaviour on average (Bailey et al., 2009; Kaplan & Liu, 1999a; Rowe & Farrington, 2006). The results of these studies suggested that criminal behaviour of parents was moderately correlated with their children’s criminal behaviour. It is possible, therefore, that the small magnitude of the observed similarity in criminal behaviour reflects that intergenerational discontinuity in criminal behaviour does also exist. In other words, not all children with criminal parents follow in their criminal parents’ footsteps. As Thornberry (2020:390) observes: “there is no significant level of intergenerational continuity, and that discontinuity is just as likely as continuity”. Little empirical evidence for intergenerational discontinuity is available to support this, but a few attempts have been made to understand the phenomenon of bad parents with good children.

Several studies have found evidence for discontinuous or dissimilar patterns produced across generations. For example, Dong and Krohn (2015) showed that the cycle of problematic behaviours within families was broken if children had a good quality of relationship with their parents. Smith et al. (1995) also found that more than half of high-risk children were resilient
to delinquency and drug use, and these were also children who tended to receive better parental supervision and have stronger attachments with their parents. Similarly, Kolvin et al. (1990) showed that deprived children who did not commit crimes tended to receive good parental supervision and discipline. They concluded that “good parenting protects against the acquisition of a criminal record” (p. 22). Support for these findings was further provided by Farrington (2011) and Giordano et al. (2002), as they suggested that individuals with criminal histories can actually be effective parents. Although much remains unclear, it seems that good parental supervision and an emotionally close relationship with parents protect children from the risk posed by their parents’ engagement in criminal behaviour.

This section has attempted to provide a brief summary of the literature related to intergenerational continuity and discontinuity of crime across generations. This brief overview suggests that there is an intergenerational cycle of criminal behaviour, but at the same time, this cycle within families can also be broken. An important question, then, is why, how, and under which circumstances children of criminal parents do or do not repeat their parents’ criminal behaviour. The following section will discuss several theoretical explanations to clarify some of the plausible factors and processes involved in continuities and discontinuities in criminal behaviour.

2.2. Theoretical explanations for the transmission of crime

Various theoretical frameworks have been proposed to explain continuous patterns of criminal behaviour between parents and children. Based on data from the Cambridge Study in Delinquent Development (CSDD), Farrington (2002) discusses six mechanisms that may explain intergenerational transmission of crime. These are: (1) intergenerational continuities in exposure to multiple risk factors; (2) mediation through environmental risk factors; (3) mutual influences of family members on each other; (4) genetic mechanisms; (5) official bias; and (6) assortative mating (Farrington, 2002; Rowe & Farrington, 2006). These mechanisms are not necessarily mutually exclusive and may operate in interaction with each other in complex ways. Another important theory seeking to explain intergenerational transmission is Thornberry’s intergenerational extension of his Interactional Theory of offending (Thornberry, 2005; Thornberry & Krohn, 2005). This chapter first discusses Farrington’s six mechanisms by grouping them into three explanations: (1) environmental explanations; (2) genetic
explanations; and (3) combined gene-environmental explanations. Issues relating with family factors are also discussed with these three frameworks, when relevant. At the end, Thornberry’s interactional theory will also be discussed.

2.2.1. Environmental explanations

Among Farrington (2002, 2011) theoretical framework, four mechanisms suggest the possibility of environmental factors playing a part in intergenerational transmission. The first mechanism suggests that intergenerational transmission is the result of transmission of criminogenic risk factors for criminal behaviour, such as poverty, large family size, drug abuse, teenage pregnancy, high school dropout, unemployment, living in deprived neighbourhoods, parental disharmony, parental criminality, and poor childrearing. Farrington (2011:133) refers to this as the ‘cycle of deprivation’. As a result of the transmission of risk factors, both parents and children are at increased risk for developing criminal behaviour. According to this mechanism, crime is not directly transmitted, but through continuity of a constellation of criminogenic features across generations (Farrington, 2011; West & Farrington, 1977). The way in which transmission of crime across generations is linked to transmission of risk factors has been supported through studies that have examined parental divorce (Amato & Keith, 1991; Demo & Acock, 1988; Harris, 1995), parental drug use (Bailey et al., 2006; Pears et al., 2007), poverty (Bird, 2013), poor childrearing (Capaldi et al., 2003; Hops et al., 2003; Thornberry et al., 2003) and teenage parenthood (Kahn & Anderson, 1992).

The second mechanism explains transmission through environmental mediators. Here, studies have investigated risk factors and their possible effects as mediators, such as poverty, teenage pregnancy, living in deprived neighbourhoods, poor childrearing, and so on. According to this mechanism, the environmental mediators develop a link in the causal association between criminal parents and criminal children. Simply put, criminal parents cause negative environmental factors, and these factors cause their children’s offending. For example, criminal parents may experience poverty, live and raise their children in deprived areas, use poor parenting skills, and as a result, their children are at increased risk for the development of criminal behaviour (Farrington et al., 2001; Sampson & Laub, 1993; Smith & Farrington, 2004). Support for this mechanism was found by Sampson and Laub (1993) as parental criminality did not predict their children’s criminality after controlling for family factors, such as large
family size, low attachment between parent and child, harsh or erratic discipline, and poor supervision. Similarly, recent studies have demonstrated that continuity in criminal behaviour from fathers to children was mediated through fathers’ or children’s educational attainment (Hjalmarsson & Lindquist, 2012; Ramakers et al., 2011). Moreover, there is much evidence for the mediating role of parenting behaviour in the association between parental criminality and child criminality. Criminal parents are often related to poor parental supervision and harsh or erratic discipline, and this leads to criminal behaviour in the next generation (Capaldi & Clark, 1998; Patterson & Capaldi, 1991; Patterson & Dishion, 1988). Support for this has been provided by evidence indicating that the effect of parents’ criminal behaviour on their children’s criminal behaviour was mediated by parenting behaviours, such as poor parental supervision (Smith & Farrington, 2004; West & Farrington, 1977), parental authoritarianism and parental conflict (Smith & Farrington, 2004), aggressive parenting (Hops et al., 2003), and poor parenting (Capaldi et al., 2003).

The third mechanism of intergenerational transmission of crime focuses on direct and mutual influences of family members. This mechanism relates to social learning, in which children learn to adopt criminal behaviours of their parents and/or siblings through observation, modelling, and reinforcement (Bandura, 1973; Burgess & Youngblade, 1988). Within the family environment, criminal parents may act as negative role models and pass on criminal behaviours that their children may observe and imitate (Farrington, 2011). Criminal parents may even engage in crime together with their children (Farrington, 2011). Along with parents, criminal siblings may learn criminal behaviours from each other and may even offend together (Warr, 1993). Moreover, children may learn criminal behaviour through interactions with criminal parents and/or criminal siblings by which they develop motives, attitudes, and values favourable to criminal behaviour (Sutherland, 1947). Children’s learned behaviours are also reinforced through their parents’ approval and rewards over a time, and thus criminal behaviours become viewed as acceptable (Akers, 1977; Bandura, 1973). Although there is clear evidence for sibling co-offending, previous CSDD analyses reveal that few parents approve of their children engaging in crime (Farrington, 2003a; West & Farrington, 1977). This does not, however, necessarily imply that children do not imitate and learn criminal behaviour from their parents; they can still model their parents’ criminal behaviour despite parental refusal (Besemer et al., 2017).
One of the most prominent social learning theories is Patterson and colleagues’ coercion model, which views coercion and negative reinforcement as social interaction learning processes involving parents and children, which ultimately lead to antisocial behaviours (Patterson, 1982; Patterson et al., 1992; Synder & Patterson, 1995). The main idea underlying this model is that antisocial behaviour develops in families when parents initiate coercive interactions involving angry, hostile, and harsh verbal or physical cues in an attempt to control their children. This pattern of parent-child interaction produces a socialization process in which a child learns to use coercive reactions to terminate coercive situations (referred to as negative reinforcement) (Patterson, 1982). Consequently, the child learns that coercive and antisocial behaviours are functional, which in turn increases the probability that as adults the child will use coercive interaction styles with their own children (Patterson et al., 1992; Patterson et al., 1993). Therefore, a cycle of problematic family interactions involving learning processes between parents and children is repeated, eventually increasing the risk of transmission of crime across generations (Patterson et al., 1992). In agreement with this theory, many studies show that problems in parenting practices (e.g., poor monitoring, coercive interactions, hostility, harsh or erratic discipline) result in antisocial and criminal behaviours of children in the next generation (e.g., Patterson & Capaldi, 1991; Patterson et al., 1989; Smith & Stern, 1997). Support for the idea of social learning has been provided by evidence showing a stronger intergenerational transmission of crime when parents commit crime after the birth of a child (Bijleveld & Wijkman, 2009), when criminal fathers lived with or had frequent contact with the child (Thornberry et al., 2009a), or when criminal fathers had not been separated from their children (Farrington & Crago, 2016). Taken together, the evidence suggests that the transmission of crime between parents and children may be at least partially due to the outcomes of possible learning mechanisms operated within the family.

In line with Farrington (2002, 2011) theoretical framework, the fourth mechanism that explains transmission is through the official (police and court) bias towards known criminal families. According to the official bias mechanism, children of criminal parents are at higher risk for engaging in criminal behaviour because they tend to be intensively monitored by the police and thus more likely to be officially processed, including being prosecuted, cautioned, arrested, and convicted (Farrington, 2002). This also relates to the process of ‘labelling’, whereby children born to criminal parents have a greater likelihood of perceiving themselves as a criminal (i.e., ‘self-fulfilling prophecy’) and thus amplifying their criminal behaviour (Rowe
& Farrington, 2006). Sampson and Laub’s (1997) idea of cumulative disadvantage suggests that such labelling has a stronger effect on people who are already in socially and economically disadvantaged situations, for example, having a criminal parent (Ageton & Elliott, 1974; Foster & Hagan, 2007; Harris, 1976; Jensen, 1980). In the context of intergenerational transmission of crime, being labelled as a child of criminal parents may put the child at risk of conforms to criminal attitudes, values, and beliefs, being associated with delinquent groups, or even being pushed into a criminal lifestyle due to possible blockages of pathways into a conventional life (Bernburg et al., 2006; Link & Phelan, 2001; Matsueda, 1992; Paternoster & Iovanni, 1989). Besemer et al. (2013) found evidence for this, suggesting that parental conviction was associated with an increased likelihood of their children being convicted, even after controlling for the children’s level of self-reported criminal behaviour.

2.2.2. Biological or genetic explanations

Farrington (2002) described biological or genetic explanations for intergenerational transmission of crime. According to this explanation, criminal parents may have some genetic propensities to engage in crime, and these genetic propensities may be transmitted to their children, thereby increasing the likelihood of their children becoming criminally involved too. Accordingly, similarity in criminal behaviour between parents and children may result from genetic similarity in specific domains such as low intelligence, high impulsivity, high testosterone levels, and low heart rates (Farrington, 2007; Farrington et al., 1996; Mednick et al., 1983; Olweus, 1987). As an example, Gottfredson and Hirschi (1990) explain the association between parents’ and children’s criminal behaviour through similarities in self-control between parents and their children. In support of genetic mechanisms, there is considerable evidence that criminal, antisocial, aggressive and violent behaviour are heritable (Cadoret et al., 1997; Grove et al., 1990). Support for genetic mechanisms has also been found in several twin and adoption studies. For example, in a twin study comparing the concordance in offending rates between identical twins and fraternal twins, Raine (1997) found a higher concordance in offending rates among identical twins than fraternal twins. A common objection to twin studies is, however, that stronger resemblances in criminal behaviour between identical twins could also be due to similarities in the environment in which they grow up. In an adoption study by Cadoret et al. (1997), it was found that biological mothers’ antisocial behaviour was
related to the antisocial behaviour of their adopted-away children. Similar results were observed from another adoption study, which showed that adopted children’s criminal behaviour was strongly related to their biological parents’ criminal behaviour (Brennan et al., 1993). The main objection to adoption studies is, however, that some of the adopted children might have kept in touch or might have kept seeing their biological parents regularly. Considering all of this evidence, it seems that genetic risk factors shared between generations can account for some of the transmission of criminal behaviour across generations. However, many studies acknowledge that having a genetic propensity to engage in criminal behaviour does not mean that individuals will actually engage in criminal behaviour (Van de Weijer et al., 2014; Widom & Wilson, 2015), suggesting instead now the interaction with environmental factors is what may truly explain the intergenerational transmission of criminal behaviour.

2.2.3. Gene-environmental explanations

A possible explanation for the association between parents’ and children’s criminal behaviour is through the interaction between genetic and environmental influences. There is now sufficient evidence that both genetic and environmental influences – and possibly their interaction – are of importance for the development of criminal behaviour. In support of this, a meta-analysis of 51 twin and adoption studies found that around half of the variance in antisocial behaviour was due to genetic factors, but the remaining half of the variance was also explained by environmental factors (Rhee & Waldman, 2002). The results of this meta-analysis emphasise the need to explore how both genetic and environmental influences act and interact – the interplay of genetic and environmental influences. Several adoption studies have consistently shown evidence for the interaction between genetic and environmental influences in accounting for antisocial and criminal behaviour (e.g., Bohman, 2007; Cadoret et al., 1997; Cloninger & Gottesman, 1987; Mednick et al., 1983). For example, the highest rates of criminal behaviour among adoptees were found for those who have both a criminal biological parent and are raised with a criminal adoptive parent (Bohman, 2007; Mednick et al., 1983) or those who had criminal biological parents and were badly brought up by their adoptive parents (Cloninger & Gottesman, 1987). In another adoption study, Cadoret et al. (1997) found adverse environments in adoptive homes interacting with antisocial personality disorder resulted in increased aggression and conduct disorder in adoptees. This interaction was found to be more
potent than the contribution of genetic or environmental effects alone. These findings are in agreement with the biosocial theories of crime, which suggest that adverse social factors (e.g., a negative family environment) in combination with biological risk factors (e.g., deficits in biological functioning) contribute to criminal outcomes (Mednick, 1977). Mednick (1977) refers to this as a ‘dual hazard’ effect, which means that the interaction between genetic and environmental factors produces larger effects than the two factors acting alone. Taken together, although the precise way in which both genetic and environmental influences interact to predict criminal behaviour still remains unclear (DeLisi et al., 2009), these studies have provided evidence for the role of both genetic and environmental effects of criminal parents to familial perpetuation of criminal behaviour.

The gene-environmental explanation is supported by one of the six mechanisms described by (Farrington, 2011), which is the mechanism of ‘ assortative mating’. This mechanism explains that people tend to form a close relationship with those who are similar to them, and thus people with criminal tendencies are likely to seek partners who also have criminal tendencies (Boutwell et al., 2012; Krueger et al., 1998; Rhule-Louie & McMahon, 2007). Rowe and Farrington (2006) propose two main reasons why criminal people tend to select a partner with similar criminal tendencies, attitudes, and behaviours. First, antisocial people are likely to select each other as partners because they are in close physical and social proximity to each other, and this is called as social homogamy. They meet each other in the same social settings, such as schools and neighbourhoods. Second, antisocial people are likely to choose each other as partners because they have the same personality traits and behaviours as themselves, and this is called as phenotypic assortment. Support for assortative mating was found by Rowe and Farrington (2006), as they reported a strong correlation between convictions of fathers and mothers. Krueger et al. (1998) also found that the self-reported antisocial behaviour of intimate partners was closely associated. As a result of the process of assortative mating, children of criminal couples may be at a greater risk for the development of criminal behaviour compared to children with one or no criminal parent. (Scarr & McCartney, 1983) refer to this as a ‘double whammy’ effect, that is, children of two criminal parents are twice as likely to be criminal themselves because they inherit genetic predispositions to criminal behaviour twice and are raised in a criminogenic family environment (Beaver, 2013). This may highlight the importance of considering criminal behaviour of both parents in understanding familial resemblance of criminal behaviour. The mechanism of assortative
mating is therefore an important piece of the puzzle when attempting to capture the mechanisms that eventually lead to the intergenerational transmission of crime. However, it is important to note that assortative mating does not operate as a mechanism by itself because other mechanisms (e.g., genetic, environmental or risk factor mechanisms) are required to explain transmission in the first place (Besemer & Farrington, 2012).

2.2.4. **Thornberry’s intergenerational model of antisocial behaviour**

Another conceptual framework for explaining intergenerational transmission of crime is (Thornberry, 2005) interactional theory model of antisocial behaviour (Thornberry & Krohn, 2001, 2005). Interactional theory is deeply rooted in the life-course perspective, which assumes that parents’ and their children’s lives become intertwined over time and reciprocally influence one another. One of the fundamental assumptions of interactional theory is that engagement in delinquent behaviour during adolescence will have cumulative and cascading developmental consequences for the individual and, ultimately the individual’s children (Thornberry & Krohn, 2001:296). According to the theory, individuals who are engaged in delinquent behaviour during adolescence have difficulty in successfully completing the important developmental tasks of adolescence that are essential for a successful transition to adulthood. As a result, they experience disorderly transitions from adolescence to adulthood, which in turn translate into structural adversity (e.g., poverty and living in deprived neighbourhoods). In combination, these influences increase the possibility that they experience negative, stressful events during the period of early adulthood, such as depression and economic hardship, and also continue to engage in antisocial behaviour. These undesirable developmental stages compromise their effective parenting styles, thereby increasing the chance that their children will also be involved in antisocial behaviour. Based on this theory, Thornberry (2005:183) highlights the importance of parental effects on family processes, such as ‘family conflict, hostility and especially the quality of parenting’, when considering the association between parents’ and children’s antisocial behaviour. Ineffective parenting styles (including poor affective bonds between parent and child, low parental involvement with the child, poor supervision and monitoring of the child, harsh or inconsistent discipline, and at the extreme, child abuse and maltreatment) are identified as the key mediators of the impact of parental antisocial behaviour on children’s antisocial behaviour (Thornberry, 2005). To summarize, Thornberry’s intergenerational model
of antisocial behaviour suggests an alternative explanation of intergenerational transmission of antisocial behaviour through an indirect mediation of family processes, particularly ineffective parenting styles. This theoretical explanation is in line with parts of Farrington’s six-mechanism model, such as criminogenic environmental mechanisms and mediating mechanisms found in the family.

This section has attempted to discuss several theoretical explanations for intergenerational transmission of criminal behaviour. These explanations differ regarding pathways presumed to explain intergenerational transmission of criminality. They fall into three groups based on mechanisms used to account for intergenerational continuity in crime: (1) environmental explanations, (2) genetic explanations, and (3) gene-environmental explanations. Environmental explanations attempt to account for intergenerational transmission by proposing social learning processes, criminogenic environmental influences, mediating mechanisms found in the family, and official bias towards known criminal families. Genetic explanations suggest that criminal, antisocial, aggressive and violent behaviour are heritable. Gene-environmental explanations argue that intergenerational transmission of crime occurs through the interaction between genetic and environmental influences. These explanations help account for why, how, and under which circumstances children of criminal parents do or do not repeat their parents’ criminal behaviour. The following section will further expand the discussion on intergenerational transmission of crime by focusing in more detail on family-related moderators and mediators.

2.3. The existing literature on intergenerational transmission of crime

There have been few empirical investigations into intergenerational transmission of crime (Besemer et al., 2017). One of the reasons for this is because most American criminologists were trained as sociologists who are generally assumed to take an antagonistic position toward genetic explanations to human behaviour, thereby steering them away from research having anything to do with genetical roots of human behaviour (Farrington et al., 1996). Another reason is the lack of appropriate data. Generally, adequate intergenerational studies require prospective longitudinal data that is usually collected over a considerable period of crime, with many years of effort and dedication. Such data are usually observational in nature, thus involving the need to maintain contact and cooperate with a cohort over a long-
time span. Nevertheless, during the past few decades, several attempts have been made using a prospective, longitudinal study design to investigate the intergenerational transmission of criminal behaviour. Examples include: the Cambridge Study in Delinquent Development (CSDD), the Rochester Youth Development Study (RYDS), the Pittsburgh Youth Study (PYS), the Ohio Life-Course Study (OLS), the Oregon Youth Study (OYS), the Criminal Career and Life-Course Study (CCLS), and the Transfive Study. Consistent with earlier research, the results of these studies confirm the existence of intergenerational continuity in criminal behaviour. The following section will review the existing empirical research on the use of multigenerational samples as well as population-based samples. A summary of these studies is also provided in Table 2.1 (p. 47-58).

2.3.1. Multigenerational research

- *The Cambridge Study in Delinquent Development (CSDD)*

One of the best-known studies to investigate the intergenerational transmission of criminal behaviour is the Cambridge Study in Delinquent Development (CSDD), data of which are utilised in my thesis. The CSDD began in 1961 and was designed as a longitudinal cohort in which a sample of 411 working-class London boys was prospectively followed from age 8 onwards to 50 years of age, along with their parents, and over time, their children (Farrington, 2003b). The study collected data on self-reported measurements of delinquency and official conviction records for the boys and their biological relatives (including parents, siblings and children). The findings of the CSDD have confirmed the existence of transmission of crime across generations. For example, research on the CSDD, based on convictions and self-reported delinquency of the boys up to age 21, found a correlation of 0.22 between delinquent behaviour of the boys and criminal conviction of their parents (Hagan & Palloni, 1990). Other research, based on convictions of the boys up to age 40, showed a strong correlation of 0.43 between convictions of fathers and that of their boys (Farrington et al., 1996; Rowe & Farrington, 2006). Farrington et al. (1998) also observed that criminal careers developed similarly for the boys and their fathers. In the CSDD, the study of three generations (the boys, their parents, and their children) was conducted by Smith and Farrington (2004), based on convictions of the boys up to age 32. They discovered that convicted parents predicted convictions of the boys as well as conduct problems of the boys’ children. In later work on the CSDD, based on convictions of
the boys up to age 50 and convictions of their sons and daughters up to the average age of 25 in 2007, Farrington et al. (2009) did not observe a significant direct effect of grandparents’ conviction on grandchildren’s conviction, but it was found that the degree of intergenerational transfer was similar from fathers to study males and from study males to their sons. This accords with other studies, which showed stronger transmission of crime between same-sex relationships (e.g., father-son, mother-daughter) (Farrington et al., 1996; Farrington et al., 2009; Farrington et al., 2016; Rowe & Farrington, 2006). However, more recent work on the CSDD, based on convictions up to age 32 for all relatives, found little evidence for stronger same-sex effects, as mother-son relationship was stronger than father-son relationship (Farrington & Crago, 2016). Also, a significant relationship was found between grandfathers and granddaughters. Moreover, empirical evidence for intergenerational transmission of violent crimes was found, as Besemer (2012) showed that sons whose fathers committed violent crimes have a higher risk of committing violent crimes compared with sons whose fathers committed non-violent crimes. It was further found that the frequency of convictions mattered for the transmission of convictions from fathers and sons (Besemer, 2014). Results from a study by Besemer and Farrington (2012) observed a strong intergenerational transmission of criminal behaviour between fathers and children, and this transmission was due to the fact that fathers commit crimes rather than fathers’ criminal trajectories. Additionally, Farrington et al. (2017) provided evidence for intergenerational continuity in different types of crime, such as burglary, serious and minor theft, carrying a weapon, and serious motoring offences.

- **The Rochester Youth Development (RYD)**

Another important investigation into intergenerational transmission of crime is the Rochester Youth Development Study (also known as the Rochester Intergenerational Study, RIS). In 1988, the RYDS began in Rochester, U.S., and prospectively followed up the initial sample of over 10,000 high-risk adolescent boys (seventh- and eighth-grade students from public schools) from childhood through late middle adulthood, along with their parents. In 1999, the first biological child of the initial adolescent participants (a third generation of family members) was added to the datasets and followed onwards over time. The study collected data on self-reported measurements of offending and official criminal records for the boys and their families. Analyses using the RYDS provide evidence for an association between the criminal
behaviour of parents and that of their children. For example, Thornberry et al. (2003) found the association between delinquent behaviour of parents and early childhood delinquent behaviour of children. This association was found to be mediated by parenting styles under investigation: parents’ weak affective ties to children and parents’ inconsistency in disciplining children. Thornberry et al. (2006) also established an association between parental drug use and offspring drug use, but the impact of fathers’ drug use on children was limited to fathers who had ongoing contact with their children. Similar results were reported by Thornberry et al. (2009a;2009b). The results revealed that parental antisocial behaviour was associated with child antisocial behaviour for mothers and for fathers who had frequent, ongoing contact with the child. This association was found to be mainly mediated through parents’ depressive symptoms (Thornberry et al., 2009b) and parenting stress and ineffective parenting (Thornberry et al., 2009a).

- The Pittsburgh Youth Study (PYS)

The Pittsburgh Youth Study (PYS), one of the longest-running longitudinal studies on delinquency in the U.S, started in 1987 with a sample of 1,517 inner-city boys who were in the first, fourth, and seventh grades in public schools. The study prospectively followed them up from late childhood into their 20s, and information about the offending history of the boys and their relatives was obtained from the boys’ parents (Farrington et al., 2001). Research using the PYS intergenerational data offers evidence in support of intergenerational transmission of crime. For example, Farrington et al. (2001) found a strong association between arrested fathers and delinquent boys and suggested that the main link mediator of this association was a young mother, a bad neighbourhood and low guilt feelings of the boy. Similarly, Loeber et al. (1998) revealed that parental substance use predicted the Pittsburgh boy’s drug use and delinquency. Using data on the youngest and oldest samples of the Pittsburgh Youth Study, Murray et al. (2012) found that parental incarceration was significantly associated with an increased likelihood of the boy being involved in theft, and this association was partly mediated by parenting factors, such as parental stress, poor supervision, and poor parent-child communication.
In 1982, the Ohio Life-Course Study (OLS) was carried out, with 127 delinquent girls and 127 delinquent boys from a state institution in Ohio. The study prospectively followed them up over 25 years as they grew to adulthood. Data was collected through follow-up in-depth interviews with the boys and girls as well as their biological children. Results from the OLS observed the transfer of criminal behaviour from parents to children. A key study analysing the OLS data is that by Giordano (2010), in which children of the OLS females were found to be at higher risk for the development of delinquent behaviour compared with children of a control group.

The Oregon Youth Study (OYS) was conducted in 1983, with 206 adolescent boys aged 9 and 10 years and their parents living in high-crime neighbourhoods. This study followed up the boys from age 9 up to 12 years later, at which time some had children of their own, and used several sources to measure internalising and externalising behaviours, including delinquency, for the boys and their families (including parents, children and partners). Capaldi et al. (2003) found that young men’s antisocial behaviour was directly related to offspring’s temperamental risk for externalizing behaviour at age 22 months and indirectly via poor parenting practices. Findings from the OYS showed continuity in problem behaviour from grandparents to parents and from parents to children (Kerr et al., 2009). Other findings provided evidence for intergenerational transmission of externalizing behaviour between three generations as well as for stronger transmission from fathers to daughters (Kim et al., 2009).

In the Netherlands, the Criminal Career and Life-Course Study (CCLS) began in 2000 with a national sample of 5,656 men convicted in 1977 and a matched sample of 485 unconvicted men of the same age (Blokland et al., 2005). For the intergenerational design, men with at least one child that had reached the age of 12 by 2005 were included in the final sample.
of the CCLS. Therefore, 3,015 men and their 6,921 children and 485 control men and their 1,066 children were retrospectively searched in criminal records from age 12 onwards until the data collection ended in 2005. Research using the CCLS provided evidence that the number of parental convictions was strongly related to the number of children’s convictions. For example, Van de Rakt and Graaf (2008) found that children whose fathers were LC-persistent in their offending had a greater likelihood of becoming chronic offenders themselves. In another study, Van de Rakt et al. (2009) found support for intergenerational continuity between parents and children, between siblings, and between parents.

- The Transfive Study

Finally, the Transfive study was carried out with a sample of high-risk boys in a reform school in the Netherlands between 1911 and 1914. The boys and their families (including parents, children, grandchildren, and great-grandchildren) were retrospectively searched in criminal records covering the years 1882-2007. Evidence of continuity in criminal behaviour over the five generations was found, as Bijleveld and Wijkman, (2009) suggested that fathers’ delinquent behaviour in one generation is substantially related to sons’ delinquent behaviour in the next generation. This continuity was more evident if the criminal behaviour was more serious. Van de Weijer et al. (2014) also observed stronger intergenerational transmission for violent offending than non-violent offending. Similarly, Van de Weijer et al. (2015) found support for intergenerational transmission of violent offending, but only when violent fathers were absent following parental divorce.

2.3.2. Population-based studies

Several attempts have been made to examine intergenerational transmission of crime by using data considering an entire population of a particular city or a particular country, and these attempts find a way around the problem of generalizability arising from most of the studies discussed above. For example, Gaalen and Besjes (2018), investigating a large sample of 939,600 young adults aged between 18 and 22 and their parents living in the Netherlands in 2005, found support for intergenerational transmission of crime, as children of criminal parents were more likely to become criminal themselves. A study by Junger et al. (2013) used a sample
of 1,681 families who had a child in 2006 in one particular Dutch city and provided evidence of intergenerational associations in arrests. Another study by Van de Weijer (2022) used register data on all individuals born between 1996 and 2002 in the Netherlands and found that parental offending during the early childhood years (0-11) of their offspring was associated with offspring adolescent offending (ages 12-18). Using a sample of 15,117 individuals (7,719 men and 7398 women) born in 1953 and living in Stockholm in 1963, Hjalmarsson and Lindquist (2012) found that children of criminal fathers had a higher risk for criminal behaviour compared with children of non-criminal fathers. In a population-based study of 12.5 million people from Sweden, Frisell et al. (2011) found a correlation of 0.40 between violent crimes of parents and their children. Similar findings were reported in a study by Kendler et al. (2015), in which a very large sample of all 3,257,987 individuals born in Sweden between 1960 and 1990 was used. The results confirmed the existence of intergenerational transmission of each of three different types of crime: violent, property, and white-collar crime. The transmission of violent crime from parents to children was the strongest. Results from a study by Connolly et al. (2018), using a representative sample of 12,686 males and females born in the United States between 1957 and 1964 (who were aged 14 to 21 years old in 1978), found the association between parental delinquency reported during adolescence and developmental trajectories of offspring delinquency. In an Australian longitudinal population-based study of 91,635 children and their parents, Tzoumakis et al. (2020) found that intergenerational transmission was found to be strongest from mothers to daughters. In accordance with this, results from a study by Jahanshahi et al. (2021), using a nationally representative sample of 5,217 children born in Scotland in 2005 or 2006, found support for the transmission of offending between mothers and children, but only when maternal offending took place after the birth of the child and only in the case of daughters. In an Australian longitudinal population-based study of 72,771 children and their parents, Athanassiou et al. (2023) found the association between parental offending and offspring police contact, and the association was stronger for mothers compared with fathers. A recent work observed the intergenerational transmission of criminal justice involvement in the non-Western context, which is still understudied. By using population-based administrative data of five-birth cohorts in Singapore, Ting et al. (2022) found that parents’ criminal justice involvement increased the likelihood that their children would have contact with the criminal justice system.
Summarising, the existing empirical research has shown substantial improvements in the research designs used compared with earlier research that was based on non-representative samples. These results provide further support for intergenerational transmission of crime across two or more generations. While there can be no doubt about the intergenerational transmission of crime between generations, the possible underlying mechanisms behind this transmission are less clear. The following section will present and discuss some recent findings on mediating and moderating factors that may influence intergenerational transmission of crime, with a focus, primarily on family-related factors.

2.4. Research on possible mechanisms of intergenerational transmission of crime

2.4.1. Mediating mechanisms

Existing studies have examined mediators of intergenerational transmission of crime, finding that the transmission is indirect and occurs through mediating factors. There is evidence that the effect of parental criminal behaviour on child delinquency significantly decreased after controlling for some factors, suggesting that these factors may act as a mediator between parent and child criminal behaviour. These factors include intervening family-related variables, such as disrupted families (Jaffee et al., 2001), family conflict (Thornberry, 2005), harsh discipline (Bailey et al., 2009; Conger et al., 2003; Hops et al., 2003; Jaffee et al., 2001; Sampson & Laub, 1993; Thornberry, 2005; Thornberry et al., 2009b), lack of parental involvement and monitoring (Ehrensaft et al., 2003; Sampson & Laub, 1993; Smith & Farrington, 2004), and poor parenting styles (Capaldi et al., 2003; Kaplan & Liu, 1999a; Thornberry et al., 2003; Van Dijk et al., 2019).

Consistent evidence shows that parenting behaviours are one of the most powerful influences found in the family, mediating the effects of parents’ criminal behaviour on their children’s antisocial and criminal behaviour. For example, a study by Kaplan and Liu (1999a) found that the degree of intergenerational transmission of antisocial behaviour decreased after controlling for parents’ childrearing practices. Capaldi et al. (2003) showed that parents’ adolescent antisocial behaviour was indirectly related to their infants’ difficult temperament through poor parenting practices. Findings from other studies that have examined aggressive parenting styles as a mediator are similar; Hops et al. (2003) and Conger et al. (1995) found that aggressive parenting mediated the intergenerational transmission of externalising problem
behaviour. Similarly, Ehrensaft et al. (2003) observed that early onset conduct disorder (before age 15) in mothers was associated with children’s antisocial behaviour, but the effect was indirect, operating through a high level of conflict between parent and child as well as a lack of parental involvement and monitoring. More recently, in a qualitative study of 25 organised crime offenders and their families in Netherland, Van Dijk et al. (2019) found that inadequate parenting skills of the mother mediated the intergenerational transmission of organised crime. Thornberry et al. (2003) confirmed the importance of family environments, particularly parenting styles, in the transmission of criminal behaviour. Specifically, they found that parents’ adolescent antisocial behaviour affected their parenting styles, which, in turn, affected their child delinquency. It appears that parents’ criminal behaviour has an indirect effect on children’s criminal behaviour that is mediated by family-related factors, particularly parenting practices. These findings highlight the need for research incorporating data on fathers and mothers, as mothers are the primary caregiver (Ehrensaft, 2018), so mothers’ parenting may act as an important mediator of intergenerational continuity in criminal behaviour.

Three lines of research support for the mediating role played by parenting in the intergenerational transmission of criminal behaviour. First, research has shown that antisocial behaviours in parents are related to poor parenting practices. Findings from these studies suggest that parents with a history of antisocial behaviour are more likely to engage in poor parenting practices, such as harsh and inconsistent parenting practices (Capaldi & Clark, 1998; Conger & Ge, 1999; Patterson & Capaldi, 1991; Rand & Simons, 2018), inept parenting practices such as harsh or erratic discipline and passive and neglectful parenting (Farrington, 1995) and low responsive parenting (Cassidy et al., 1996). Second, a significant body of research has indicated that poor parenting practices increase the probability of a range of child deviant outcomes, such as child conduct problems or antisocial behaviour (Loeber & Dishion, 1983; Loeber & Stouthamer-Loeber, 1986; McCord et al., 1963; Patterson et al., 1989; Patterson et al., 1993), child externalizing behaviour (Beyers et al., 2003; Campbell & Ewing, 1990; Eisenberg et al., 2001; Gershoff, 2002; Leve et al., 2005; Martin, 1981; Pettit & Bates, 1989; Stanger et al., 2004), child aggressive behaviour (Patterson et al., 1989), child rule-breaking behaviours and attention problems (Stanger et al., 2004), and child delinquency and offending behaviour (Ary et al., 1999; Flanagan et al., 2019; Loukas et al., 2001; Patterson et al., 1989). Third, a solid body of research has shown intergenerational continuity in parenting practices, such as harsh and aggressive parenting (Conger et al., 2003; Hops et al., 2003) and
parental monitoring (Capaldi et al., 2003; Smith & Farrington, 2004). These findings suggest that such continuity in parenting practices may be an intervening mechanism for familial transmission of criminal behaviour.

Some of the important studies examining mediators of intergenerational transmission of crime come from the Cambridge Study in Delinquent Development (CSDD). Earlier CSDD analysis was carried out by West and Farrington (1977), based on criminal record searches of the G2 males and their parents up to 1973, when the majority of the G2 males were aged 20. They found that some environmental influences, such as poor parental supervision, harsh or erratic discipline, cruel or neglectful parents, and parental conflict, were mediators in the causal chain between criminal fathers and convicted sons. Smith and Farrington (2004) analysed intergenerational continuity in crime spanning three generations, based on convictions of the G2 males, their parents, and children up to 1985, when the G2 males were aged 32. They found that the association between convicted G1 parents and convicted G2 males was mediated by family factors such as “poor supervision, inconsistent discipline, parental conflict, and lack of affection and support” (2004:232). Auty et al. (2015) found intergenerational transmission of psychopathy from G2 males to G3 children that was mediated by psychosocial risk factors such as father’s employment problems. Similarly, Auty et al. (2017) tested possible mechanisms for the transmission of convictions from G2 parents and G3 children and found that while the G2 fathers’ drug use had a mediating influence on G3 sons’ convictions, the G2 mother’s harsh discipline mediated G3 daughters’ convictions. Farrington et al. (2017) investigated intergenerational patterns of convictions by comparing the convictions of 343 G3 sons up to the median age of 29 with the convictions of G2 fathers up to the same age. They found that the association between G2 convictions and G3 convictions was mediated by the family renting rather than owning their home, poor supervision, anti-establishment attitude, physical punishment, and separation from the G2 father. These results were similar to those of Farrington et al. (2018), who found that the transmission of self-reported offending was mediated by socio-economic deprivation, relationship problems, poor childrearing, and anti-establishment attitudes.

More recent CSDD analyses found evidence of some mediating pathways. Auty et al. (2021) studied intergenerational transmission of personality disorder in 230 G2 father-G3 son dyads and in 222 G2 father-G3 daughter dyads. They found that transmission to G3 daughters’ severe personality disorder was mediated via fathers’ employment problems, poor parental
supervision, and family disruption, but these factors had only a small effect. Their results provide limited support for the role of psychosocial factors in the intergenerational transmission of severe personality disorder. Finally, Auty et al. (2022) investigated intergenerational transmission of imprisonment based on 392 G1 father-G2 son pairs. They found that the most important mediators between fathers’ and sons’ incarceration were low family income and low socio-economic status. It appeared that fathers’ incarceration led to financial problems for the family, and that in turn contributed to incarceration in the son. These results were similar to those observed in earlier studies (e.g., Auty et al., 2015; Farrington et al., 2017). In all the analyses from the CSDD reviewed here, it seems that criminal behaviour is transmitted from one generation to the next, at least in part, through mediating mechanisms found in the family, such as poor parenting practices, lack of supervision, low socio-economic status, parental conflict, parental separation, and the like.

All in all, numerable attempts have been made to examine the mediating processes that facilitate intergenerational continuity in crime. The mediating effect of family-related factors on intergenerational transmission remains to be further elucidated, possibly by focusing on other forms of families (same-sex families, single parents, etc). My thesis aims to continue and extend the investigation of this issue by focusing on family-related factors as mediators of intergenerational transmission of crime. Earlier studies will guide this investigation, but further family-based mediators will be investigated based on in-depth family cases.

2.4.2. Moderating mechanisms

Several studies have attempted to identify factors that moderate the strength of intergenerational continuity in criminal behaviour. The results indicate that intergenerational link in criminal behaviour varies from modest to moderate, suggesting that while this link may not exist in some cases, it may be strong in other cases. Differences in intergenerational link could be due to the moderating effects of some explanatory variables. Factors that have been investigated as a moderator include the gender of the parent and the child, timing and frequency of parental offending, and the presence of fathers in the home. These factors have been shown to either reduce or strengthen the link between parents’ and children’s criminal behaviour. These will be analysed in the following sections.
2.4.2.1. Gender of parents and children

Regarding the gender of parents, the existing evidence is limited and contradictory. Some studies found that the transmission of crime is larger if mothers commit crimes (Auty et al., 2017; S. Besemer et al., 2017; Jahanshahi et al., 2021; Mednick et al., 1987; Robins et al., 1975). The results suggested that children of criminal mothers have a larger chance of criminal behaviour. For example, a study by Robins et al. (1975) found that having a delinquent mother was related to a higher delinquency rate for boys and girls than having a delinquent father. A possible explanation for these results might be that women usually have lower rates of crime, and thus criminal women come to be seen as more deviant in many aspects (Besemer et al., 2017; Besemer et al., 2016). In this respect, it seems likely that women who commit crime transfer more risks of criminal behaviour to their children compared with men who commit crimes (Gaalen & Besjes, 2018). Another possible explanation might be that women are often the close-in caregivers for children and spend much of their time with children compared with men (Ehrensaft, 2018; Moffitt et al., 2001), and thus criminal mothers have a greater chance of conferring risks of criminal behaviour to their children compared with criminal fathers (Gaalen & Besjes, 2018). Other studies, however, found almost equal mother and father influences on child criminal behaviour (Foley et al., 2001; Kendler et al., 1997), and some studies even reported weak or no association of maternal criminal behaviour with child criminal behaviour (Besemer et al., 2016; Frick et al., 1992).

Some studies in which both parents were included found a stronger paternal transmission of criminal behaviour to children (Farrington et al., 1996; Farrington et al., 2009; Farrington et al., 2001; Jaffee et al., 2001). The results demonstrated that the effects of paternal criminal behaviour on children are somewhat higher than that of maternal criminal behaviour alone. These results are likely to be related to the higher prevalence of criminal behaviour among men (Keenan et al., 2005; Moffitt et al., 2001) and their stronger familial effects than women (Blazei et al., 2006). The higher effects of paternal criminal behaviour may also be due to the loss of economic and social resources caused by paternal imprisonment (Arditti et al., 2003; Ferraro et al., 1983).

Although children of criminal parents are shown to be at increased risk of criminality themselves compared to children of non-criminal parents, there is evidence for stronger transmission for boys than girls (Besemer et al., 2017; Van de Rakt & Graaf, 2008). For
example, in the CCLS study, the majority of the boys with criminal parents committed crimes themselves, compared to a quarter of the girls (Van de Rakt & Graaf, 2008). There are several possible explanations for this result. First, boys have a higher prevalence of criminal and antisocial behaviour than girls (Blazei et al., 2006), and this may be due to differences in coping responses between boys and girls (Pearlin & Schooler, 1978). When reacting to stressful events, such as parental criminal behaviour, boys are likely to show more signs of externalizing behaviour, such as aggressive behaviour and delinquency. On the other hand, girls are likely to display more signs of internalizing behaviour, such as anxiety and depression (Farrington et al., 1996). As boys are more vulnerable to such stressful events than girls (Rutter et al., 2003), boys of criminal parents are thought to be at increased risk of showing criminal behaviour. Second, boys tend to be more exposed to risks than girls, including more contact with delinquent peers and more access to drugs (Rowe & Flannery, 1994; Rowe et al., 1995). Again, however, there is contradictory evidence that the degree of intergenerational transmission of crime was higher for girls (Tzoumakis et al., 2020). This could be explained by the fact that girls spend more time at home and are thus exposed to more adverse factors associated with parental antisociality (Silverthorn & Frick, 1999).

There is some evidence of complex intergenerational pathways, with the strength of intergenerational transmission varying with specific combinations of parent-child gender. Some studies found stronger intergenerational transmission between same-sex relationships (i.e., father-son, mother-daughter) (Auty et al., 2017; Farrington et al., 1996; Farrington et al., 2009; Farrington & Crago, 2016; Jahanshahi et al., 2021; Rowe & Farrington, 2006; Thornberry et al., 2003; Tzoumakis et al., 2020; Van Dijk et al. 2019). The stronger same-sex effects might be partly explained by learnt gender roles. According to learning theories, children adopt gender roles and tend to unconsciously identify with a parent who is of the same sex. Therefore, they are more likely to follow the behavioural patterns of their same sex-parent as they perceive as similar to them (Bussey & Bandura, 1984). Other studies, however, found stronger transmission between opposite-sex relationships, namely father-daughter and mother-son (Auty et al., 2021; Connolly et al., 2018; Kim et al., 2009). Overall, existing studies have reached different conclusions on the effect of criminal mothers and fathers on their sons and daughters. Whether the intergenerational transmission of criminal behaviour is gender-specific remains unclear. The evidence reviewed here underscores the need for more research
incorporating data on fathers and mothers and examining gender-specific patterns in the transmission of crime.

2.4.2.2. Timing and frequency of parental offending

The timing and frequency of parental crime is another important moderator of intergenerational continuity in criminal behaviour. Regarding the timing of parental crime, several studies found stronger transmission of crime when parents commit crime after the birth of a child (Besemer, 2014; Bijleveld & Wijkman, 2009; Van de Rakt et al., 2010; Van de Weijer et al., 2014). The results suggested that parental crime before the birth of a child has little or no impact on risk for criminal behaviour in offspring. Specifically, stronger transmission of crime is observed when parents commit crimes during the child’s adolescence (Besemer, 2014; Van de Weijer et al., 2014) or when parents are incarcerated after the child’s seventh birthday (Besemer et al., 2011). Van de Rakt et al. (2010) discovered the immediate effect of parental crime on risk for criminal behaviour in children, reporting a considerably increased risk for children to commit crimes in a year in which their parents also commit crimes. These studies indicated that environmental influences play an important role in the transmission of crime. Other studies, however, observed intergenerational transmission of crime when parents commit crimes only before the birth of a child (Bijleveld & Wijkman, 2009; Farrington et al., 1975; Glueck & Glueck, 1950; McCord, 1977; Robins & Lewis, 1966; Rowe & Farrington, 2006), suggesting that genetic influences may also play a role in linking generations of the same family with regard to criminal behaviour. No significant differences in transmission of crime were found between parental crime after the boy’s tenth birthday and before the boy’s birth, suggesting that father’s criminality had no direct behavioural influence on their sons’ criminality (West & Farrington, 1977). Together, these studies indicated that the timing of parental crime affects in different ways the likelihood of offspring crime, but it is still unclear as to whether parental crime before or after the birth of a child increases or decreases the risk for the child to commit crimes.

Several researchers have investigated the frequency of parental crime as factors that may influence transmission of criminal behaviour to children. Recent evidence shows that the number of crimes committed by parents is related to the number of crimes committed by children (Besemer, 2014; Van de Rakt & Graaf, 2008; Van de Weijer et al., 2017). For example,
in the CCLS study, children of more persistent offending fathers were more likely to become persistent offenders themselves (Van de Rakt & Graaf, 2008). In a birth cohort study in Singapore, Ting et al. (2022) also found that children of criminal parents who had more than one conviction were likely to be involved with the criminal justice system at an earlier age compared with children of criminal parents who had only one conviction. These findings are in line with social learning mechanisms, suggesting that if parents commit several subsequent crimes, the learning effects can occur repeatedly. Such learning effects, in turn, lead to a direct effect on criminal behaviour from parents to children. However, West and Farrington (1977) and Besemer and Farrington (2012) did not find support for this. Their results showed that the number of crimes committed by fathers does not seem to determine the likelihood that their children develop criminal behaviour. Instead, it is the fathers having a criminal history that is related to children’s criminal behaviour. Therefore, it seems that genetic influences play a role in the reproduction of crime from parents to children. Overall, whether the frequency of parental crime influences transmission of criminal behaviour to children is still unclear. Further research on this, and other moderators, is warranted.

### 2.4.2.3. The presence of fathers in the home

A small body of studies demonstrated that the transmission from fathers to children depended on the presence of a paternal figure in the home. The results suggested that the effects of paternal criminal behaviour on children’s criminal behaviour were higher when the father was present in the home. For example, Jaffee et al. (2003) found that children with antisocial fathers showed more conduct problems when their fathers lived in the family home, while children living separately from antisocial fathers showed fewer conduct problems. This study concluded that antisocial fathers who were present in the home doubled the risk of their children being antisocial. Blazei et al. (2008) attempted to extend the study of Jaffee et al. (2003) by including older samples of children. They found a stronger association between parents’ and children’s antisocial behaviour when the antisocial father was present in the home. Again, the effects of antisocial fathers decreased if the antisocial father was not present. Similarly, in the RYDS, Thornberry et al. (2009a) found significant intergenerational continuity in criminal behaviour for fathers who lived with or had frequent contact with the child. The study concluded that contact between the parent and child led to the transfer of criminal
behaviour from one generation to the next. Recent results from the CSDD indicated that the association between fathers’ and boys’ convictions was stronger when the boy had not been separated from their father, suggesting especially environmental influences were important (Farrington & Crago, 2016).

Moreover, the absence or separation from fathers may occur following parental divorce, as it is common for children to stay with their mother after a divorce (McLanahan & Sandefur, 2009) and to have less contact and involvement with their father (Manning et al., 2003). Therefore, it is assumed that parental divorce may moderate the transmission of criminal behaviour from fathers to children (Juby & Farrington, 2001). Van de Weijer et al. (2015) found support for this, as they observed stronger transmission of crime among children whose parents are not separated or divorced. Children of criminal fathers could be better off if they are separated from the father after a divorce, and in this context, parental divorce might not be a bad thing for children, given the distance from criminal fathers. Overall, these studies indicate that the absence or separation from antisocial fathers may have a protective effect against the father’s antisociality. It seems that antisocial fathers who are present in the home provide some environmental influences leading to a greater likelihood of their children becoming antisocial rather than genetic influences. However, Farrington et al. (2017) study comparing the convictions of 343 adult sons with the convictions of their fathers up to the same age, provided very little evidence for stronger intergenerational transmission for the boys who had not been separated from their fathers.

On the other hand, it has been suggested that parental separation or divorce are associated with offspring’s risk for criminal behaviour. Many studies (e.g., Henry et al., 1996; Kolvin et al., 1988) have shown that parental separation or divorce might be harmful to children and are therefore likely to increase offspring’s risk for criminal behaviour in three main ways; first, through the fewer economic and social resources available to children (McLanahan & Sandefur, 2009), second, by weaker attachments to parents (Hirschi, 2017) and, third, through lower levels of parental supervision because of one of the parents being absent from home (Sampson & Laub, 1990, 1993). Consequently, children who have criminal parents and who have been separated from one of their parents may be at greater risk for criminal behaviour. Following this, one would expect a stronger effect of parental crime on children who experience parental separation or divorce. Overall, further work needs to be done to establish
whether the absence of a paternal figure in the home reduces or strengthens the link between parents’ and children’s criminal behaviour.

Taken together, there seems to be some evidence to indicate that the gender of parents and children, the timing and frequency of parental crime, and the presence of fathers act as important mediators, either reducing or strengthening the association between parents’ and children’s criminal behaviour. It is, however, hard to draw any firm conclusions on this because of the lack of studies identifying factors that moderate the transmission of crime from parents to children. Therefore, my thesis attempts to add to the small literature by focusing on factors, primarily family-related factors, that possibly moderate the negative effects of having criminal parents.
2.5. Limitations of previous research

The existing literature reflects considerable improvements over the research design used in the earlier studies. However, some of the results that have emerged out of the literature appear to be inconsistent due to methodological weaknesses and discrepancies in studies.

The findings on the intergenerational transmission of criminal behaviour mostly come from studies that have used retrospective measures of some variables in at least one generation (Bijleveld & Wijkman, 2009; Farrington et al., 2001; Junger et al., 2013; J. McCord, 1977; Van de Rakt & Graaf, 2008; Robins et al., 1975). Retrospective measurement methods are based on participants’ recollection of past information, leading to biased recall and reconstruction of memory (McGee et al., 1995; Widom & Shepard, 1996). For example, a study by Farrington et al. (2001) used retrospective data collected from the mother only. In their study, the mother might have not been aware of some important information, or the mother might have had some bias that may be embedded in her response (McGee et al., 1995; Widom & Shepard, 1996). Moreover, in their study, the use of self-reports as the sole source of data could have distorted estimates of the strength of the relationship between generations. Therefore, independent and multiple reporters is recommended to avoid some bias in retrospective reports and increase confidence in research findings. Using prospective data is also needed to minimize reliance on retrospective data and ensure proper temporal ordering between causal factors and effects.

Some studies (e.g., McCord, 1999; Robins et al., 1975; Van de Weijer et al., 2017) use small sample size (less than 300) and thus have issues with the generalizability of their results. Moreover, some studies are limited by the use of high-risk samples. For example, the Criminal Career and Life-Course Study (CCLS) uses a sample of individuals who were prosecuted, the Transfive study selected a sample of young men who were placed in a reform school, and the Rochester Youth Development (RYDS) selected a sample of high-risk youth. These studies fail to observe what proportion of children who are not at risk for criminal development have criminal parents. Using high-risk samples can also overestimate the impact of criminal parents on children’s criminal behaviour. Therefore, research using larger samples and incorporating data on both criminal children and non-criminal children is required to have greater generalizability for the results and more confidence in the research outcomes. Although population-based studies (Gaalen & Besjes, 2018; Hjalmarsson & Lindquist, 2012; Junger et al., 2013; Kendler et al., 2015) have larger sample sizes, they lack in-depth data on several
relevant risk factors for criminal behaviour as well as detailed information on criminal behaviour, since in most cases, they include register data available for only a limited period.

Some studies (e.g., Fergusson et al., 2000; Glueck & Glueck, 1968; Robins et al., 1975; Van de Weijer et al., 2017) include a short follow-up period and measure offspring criminal behaviour at relatively young ages (up to 17 or 18). They fail to measure criminal behaviour at similarly developmental stages for all generations and thus capture stronger effects of parental criminal behaviour on offspring than other studies that measure offspring criminal behaviour later in life. Besemer et al.’s (2017) recent meta-analysis of the intergenerational transmission of criminal behaviour found evidence that the strength of associations between parent and offspring crime was strongest when offspring criminal behaviour was measured at late-adolescence or young-adulthood. A longer follow-ups longitudinal study is therefore needed to trace a more complete understanding of intergenerational patterns in criminal behaviour across generations. Moreover, some studies (e.g., Bijleveld & Wijkman, 2009; Capaldi et al., 2003; Farrington et al., 2009; Smith & Farrington, 2004; Thornberry et al., 2003) follow only two generations and do not measure grandparents’ criminal behaviour (G1 generation). Consequently, it remains unclear to what extent the criminal behaviour of grandparents contributes to that of grandchildren. Given the increasing role of grandparents in grandchildren’s lives (Hayslip & Kaminski, 2005), more analyses are needed to discover the association between grandparents’ and grandchildren’s criminal behaviour. Therefore, data on at least three generations is needed to draw more appropriate comparisons across generations at comparable ages or developmental stages of life.

Only a few studies measure criminal behaviour for all generations in both sexes (i.e., fathers/mothers-sons/daughters) (e.g., Auty et al., 2017; Farrington et al., 2009; Kim et al., 2009; Tzoumakis et al., 2020; Van de Weijer et al., 2014). Many studies only measure criminal behaviour for males, mostly fathers and sons, and thus they largely neglect the relative influence of criminal fathers and mothers on their sons and daughters. Therefore, more research needs to incorporate data on males and females and analyse the data separately in order to examine gender-specific patterns in the transmission of crime. Moreover, many studies use official records as a measure for criminal behaviour, which may lead to an underestimation of the actual prevalence of criminal behaviour, particularly among females who have relatively low rates of offending and commit less serious offending. Therefore, the use of both official

44
records as well as self-reports as a measure of criminal behaviour is recommended, especially when examining gender-specific patterns in the transmission of crime.

Lastly and most importantly, most studies of intergenerational transmission of criminal behaviour, utilize quantitative datasets, such as official record data (e.g., Besemer & Farrington, 2012; Athanassiou et al., 2023), self-report data (e.g., Capaldi et al., 2003; Giordano, 2010), or a combination thereof (e.g., Auty et al., 2017; Kerr et al., 2009). These studies focus specifically on the extent to which criminal behaviour is transmitted across generations and/or the factors that may account for the transmission but do not provide an explanation for how processes of intergenerational transmission occur. Important questions still remain unanswered about the mechanisms through which the transmission occurs.

2.6. The current dissertation

My thesis is designed to address some of the concerns raised in earlier sections. It will use data from the Cambridge Study in Delinquent Development (CSDD) to investigate intergenerational continuity and discontinuity in criminal behaviour. The CSDD is one of the few studies that combine a large sample size of 411 males with prospectively gathered data through personal interviews with hundreds of people in three successive generations over the entire life-course (Farrington et al., 2009). Data on three generations of individuals – that is: 411 study males, their female partners, the parents of G2 males (fathers and mothers), and the children of G2 males (sons and daughters) – is available, enabling an in-depth examination of gender-specific patterns in the transmission of crime. A key strength of the CSDD is its focus on crime and antisocial behaviour, with advanced knowledge about the development of criminal and antisocial behaviour, risk factors, and the effects of transitions in one’s life course. The CSDD includes a wide range of risk factors for criminal behaviour, measured from multiple sources (i.e., the study males, their parents, teachers, and peers), such as psychological (e.g., intelligence, impulsivity), family (e.g., parental supervision and discipline, family size, young parents), and social (e.g., poor housing, socio-economic status, peer delinquency, employment status) factors (Farrington et al., 2006). Such information enables more refined analyses of possible factors and processes that account for both continuity and discontinuity of criminal behaviour across three generations (Farrington, 2003b). Some of the limitations of CSDD should also be noted since the study has inevitably suffered from some challenges. For
example, in the CSDD, genetic information is not available, so it is difficult to examine the extent to which the intergenerational transmission of criminal behaviour is mediated by genetic factors. Another limitation is that the CSDD pays less attention to protective factors and more to risk factors, although many CSDD researchers have attempted to explain resilience (Craig et al., 2020; Farrington et al., 2016; Ttofi & Farrington, 2016).

The importance and originality of my thesis lie in that it examines possible family risk factors and mechanisms underlying intergenerational continuity and discontinuity in criminal behaviour by using a wealth of data from the CSDD. In an attempt to do so, my thesis analyses data on both criminal grandparents and non-criminal grandparents, both criminal parents and non-criminal parents, and both criminal grandchildren and non-criminal grandchildren. Moreover, the qualitative case histories of the CSDD individuals can provide more valuable insight into the influence of family risk factors, processes, and mechanisms not only on the development of criminal behaviour but on the continuity and discontinuity in criminal behaviour across generations. Its main strength is in being able to trace a complex and dynamic picture of those individuals who follow in their criminal parents’ footsteps or not. This examination allows for a more integrative quantitative and qualitative explanation of how one generation’s involvement in criminal behaviour influences the next generation’s involvement in criminal behaviour. This can make a real contribution to crime prevention and intervention with individuals from criminal families, which can increase the potential for better outcomes for these individuals, their families, and their communities. It is also hoped that findings will help shape more effective interventions which are implemented not only at the level of the offender but at the level of the whole family unit.
### Table 2.1.

**Overview of intergenerational transmission studies**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Dataset</th>
<th>N</th>
<th>Measurement</th>
<th>Selection</th>
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<tbody>
<tr>
<td>Auty, Farrington &amp; Coid</td>
<td>2017</td>
<td>Cambridge Study in Delinquent Development (London)</td>
<td>Males and their families (including wives and children) (a sample of 527 pairs; 281 fathers/mothers and male offspring, 246 fathers/mothers and female offspring)</td>
<td>Self-reports and official records</td>
<td>Convicted males and non-convicted males (up to age 32)</td>
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<tr>
<td>Besemer</td>
<td>2012</td>
<td>Cambridge Study in Delinquent Development (London)</td>
<td>411 males and their families (including fathers and male siblings) (n=782)</td>
<td>Official records</td>
<td>Convicted and non-convicted males (up to age 40)</td>
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<tr>
<td>Besemer</td>
<td>2014</td>
<td>Cambridge Study in Delinquent Development (London)</td>
<td>411 males and their families (including 397 parents and 773 siblings)</td>
<td>Official records</td>
<td>Convicted and non-convicted children (up to age 40)</td>
</tr>
<tr>
<td>Besemer &amp; Farrington</td>
<td>2012</td>
<td>Cambridge Study in Delinquent Development (London)</td>
<td>411 males and their families (including 397 fathers and 773 siblings)</td>
<td>Official records</td>
<td>Convicted and non-convicted children (up to age 40)</td>
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<td>Besemer, Farrington &amp;</td>
<td>2013</td>
<td>Cambridge Study in Delinquent Development</td>
<td>411 males and their children</td>
<td>Self-reports and official records</td>
<td>Convicted males and non-convicted males (between ages 15-18, 19-26 and 27-32)</td>
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<td>Bijleveld</td>
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<td>(London)</td>
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<td>Farrington, Barnes &amp;</td>
<td>1996</td>
<td>Cambridge Study in Delinquent Development</td>
<td>397 males and their families</td>
<td>Official reports</td>
<td>Convicted and non-convicted males (up to age 40)</td>
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<td>Lambert</td>
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<td>(London)</td>
<td>(including parents, siblings, and wives)</td>
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<tr>
<td>Farrington, Coid &amp;</td>
<td>2009</td>
<td>Cambridge Study in Delinquent Development</td>
<td>397 males and their families</td>
<td>Self-reports and official records</td>
<td>Convicted and non-convicted males (aged 50)</td>
</tr>
<tr>
<td>Murrary</td>
<td></td>
<td>(London)</td>
<td>(including parents and children; 298 male children, and 265 female children, the average age of 25)</td>
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<tr>
<td>Farrington &amp; Crago</td>
<td>2016</td>
<td>Cambridge Study in Delinquent</td>
<td>392 males and their families</td>
<td>Official records</td>
<td>Convicted males and non-convicted males</td>
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<td></td>
<td></td>
<td>(including 784 parents, 1,010)</td>
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<tr>
<td>Farrington, Lambert &amp; West</td>
<td>1998</td>
<td>Cambridge Study in Delinquent Development (London)</td>
<td>411 males and their families (including parents, siblings, and wives)</td>
<td>Official reports</td>
<td>Convicted and non-convicted males (up to age 40)</td>
</tr>
<tr>
<td>Farrington, Toffi &amp; Crago</td>
<td>2017</td>
<td>Cambridge Study in Delinquent Development (London)</td>
<td>411 males and their children (343 males and 313 females)</td>
<td>Self-reports and official records</td>
<td>Convicted males and non-convicted males</td>
</tr>
<tr>
<td>Hagan &amp; Palloni</td>
<td>1990</td>
<td>Cambridge Study in Delinquent Development (London)</td>
<td>218 males and their fathers</td>
<td>Self-reports and official records</td>
<td>Convicted and non-convicted males (up to age 21)</td>
</tr>
<tr>
<td>Rowe &amp; Farrington</td>
<td>2006</td>
<td>Cambridge Study in Delinquent Development (London)</td>
<td>344 males and their families (including parents, siblings, and children)</td>
<td>Self-reports and official records</td>
<td>Convicted and non-convicted males (up to age 40)</td>
</tr>
<tr>
<td>Authors</td>
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<tr>
<td>Smith &amp; Farrington</td>
<td>2004</td>
<td>Cambridge Study in Delinquent Development</td>
<td>(Males with two or more children)</td>
<td>Self-reports and official records</td>
<td>Convicted and non-convicted males (up to age 32)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(London)</td>
<td>178 males and their families</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(including 408 fathers and 338 children aged between 3 and 15)</td>
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**Rochester Youth Development Study (RYDS)**

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<thead>
<tr>
<th>Authors</th>
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<th>Measurement</th>
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<tbody>
<tr>
<td>Thornberry, Freeman-Gallant &amp; Lovegrove</td>
<td>2009a</td>
<td>Rochester Intergenerational Study (New York)</td>
<td>276 G2 fathers, 148 G2 mothers and G3 children (families with the child aged between 4 and 9)</td>
<td>Self-reports</td>
<td>Selection of seventh and eighth graders in public schools in 1988</td>
</tr>
<tr>
<td>Thornberry, Freeman-Gallant &amp; Lovegrove</td>
<td>2009b</td>
<td>Rochester Intergenerational Study (New York)</td>
<td>223 G2 fathers, 137 G2 mothers and G3 children (families with the child was aged between 7 and 9)</td>
<td>Self-reports</td>
<td>Selection of seventh and eighth graders in public schools in 1988</td>
</tr>
</tbody>
</table>
Table 2.1. Overview of intergenerational transmission studies

<table>
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<tr>
<th>Authors</th>
<th>Year</th>
<th>Dataset</th>
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<th>Measurement</th>
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**Pittsburgh Youth Study (PYS)**

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<tr>
<th>Authors</th>
<th>Year</th>
<th>Dataset</th>
<th>N</th>
<th>Measurement</th>
<th>Selection</th>
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</thead>
<tbody>
<tr>
<td>Farrington, Jolliffe, Loeber, Stouthamer-Loeber &amp; Kalb</td>
<td>2001</td>
<td>Pittsburgh Youth Study (Pittsburgh)</td>
<td>1,395 boys and their families (including parents, siblings, uncles, aunts, and grandparents)</td>
<td>Self-reports</td>
<td>Selection of first, fourth, and seventh grade boys enrolled in Pittsburgh public schools</td>
</tr>
<tr>
<td>Loeber, Farrington, Stouthamer-</td>
<td>1998</td>
<td>Pittsburgh Youth Study (Pittsburgh)</td>
<td>1,517 boys who were aged 7-13</td>
<td>Self-reports and official records</td>
<td>Selection of first, fourth, and seventh grade boys enrolled in Pittsburgh public schools</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Dataset</td>
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<tr>
<td>Loeber, &amp; Van Kammen</td>
<td>2012</td>
<td>Pittsburgh Youth Study (Pittsburgh)</td>
<td>503 boys in the youngest, 506 in the oldest cohort, and their parents</td>
<td>Self-reports, parents’ reports, teachers’ reports, and official records</td>
<td>Selection of first, fourth, and seventh grade boys enrolled in Pittsburgh public schools</td>
</tr>
<tr>
<td>Murray, Loeber, &amp; Pardini</td>
<td>2012</td>
<td>Pittsburgh Youth Study (Pittsburgh)</td>
<td>503 boys in the youngest, 506 in the oldest cohort, and their parents</td>
<td>Self-reports, parents’ reports, teachers’ reports, and official records</td>
<td>Selection of first, fourth, and seventh grade boys enrolled in Pittsburgh public schools</td>
</tr>
<tr>
<td>Ohio Life-Course Study (OLS)</td>
<td>2010</td>
<td>Ohio Life-Course Study</td>
<td>127 delinquent girls their 158 biological children</td>
<td>Self-reports</td>
<td>Girls from a state institution in Ohio and a community-based comparison group</td>
</tr>
<tr>
<td>Oregon Youth Study</td>
<td>2003</td>
<td>Oregon Youth Study (Pacific North-West)</td>
<td>68 young men and their 99 offspring (45 boys and 50 girls, the average age of 21.8 months)</td>
<td>Self-reports</td>
<td>Selection of fourth-grade boys (aged 9-10 years) from six schools located in areas with higher-than-average delinquency rates</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Dataset</td>
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<tr>
<td>Kerr, Capaldi, Pears, and Owen</td>
<td>2009</td>
<td>Oregon Youth Study (Pacific North-West)</td>
<td>102 young men and their families (including young men’s parents and 181 offspring)</td>
<td>Self-reports, parents’ reports, and official records</td>
<td>Selection of fourth-grade boys (aged 9-10 years) from six schools located in areas with higher-than-average delinquency rates</td>
</tr>
<tr>
<td>Kim, Capaldi, Pears, Kerr &amp; Owen</td>
<td>2009</td>
<td>Oregon Youth Study (Pacific North-West)</td>
<td>206 young men and their families (including 204 parents, 150 intimate partners, and 230 children at ages 18-21 months and 3 years)</td>
<td>Self-reports, both parents’ reports, and official records</td>
<td>Selection of fourth-grade boys (aged 9-10 years) from six schools located in areas with higher-than-average delinquency rates</td>
</tr>
</tbody>
</table>

**Criminal Career and Life-Course Study (CCLS)**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Dataset</th>
<th>N</th>
<th>Measurement</th>
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<tbody>
<tr>
<td>Van de Rakt, Nieuwbeerta &amp; Apel</td>
<td>2009</td>
<td>Criminal Career and Life-Course Study</td>
<td>4,271 males and their 6,952 children aged at least 12</td>
<td>Official records</td>
<td>The original CCLS males and a matched control group of 575 never-convicted men (of whom 1,066 control children)</td>
</tr>
<tr>
<td>Van de Rakt, Nieuwbeerta &amp; De Graaf</td>
<td>2008</td>
<td>Criminal Career and Life-Course Study</td>
<td>4,271 males and their 6,952 children aged at least 12</td>
<td>Official records</td>
<td>The original CCLS males and a matched control group of 575</td>
</tr>
<tr>
<td>Authors</td>
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<td><strong>Transfive study</strong></td>
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<tr>
<td>Bijleveld &amp; Wijkman</td>
<td>2009</td>
<td>Transfive study (5 generation study)</td>
<td>All five generations (G1 to G5)</td>
<td>Official reports</td>
<td>Selection of adolescent males (G2) in reform school between 1911 and 1914</td>
</tr>
<tr>
<td>Van de Weijer, Bijleveld &amp;</td>
<td>2014</td>
<td>Three youngest generations from the Transfive study (5 generation study)</td>
<td>Two sub-samples</td>
<td></td>
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<tr>
<td>Blockland</td>
<td></td>
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<td>1. G3 to G5</td>
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<td>1,121 G5 members (aged 18 and older), their 1,209 G4 parents, and 525 G5 grandparents</td>
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<td>2. G4 to G5</td>
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<td></td>
<td>1,142 G4 members (aged 18 and older) and their 857 G3 parents</td>
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<tr>
<td>Van de Weijer, Thornberry,</td>
<td>2015</td>
<td>Two youngest generations from the Transfive study (5 generation study)</td>
<td>2,374 G4 and G5 aged 18 and older, and their parents</td>
<td>Official records</td>
<td>Selection of adolescent males (G2) in reform school between 1911 and 1914</td>
</tr>
</tbody>
</table>
### Table 2.1.
Overview of intergenerational transmission studies

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<tr>
<th>Authors</th>
<th>Year</th>
<th>Dataset</th>
<th>N</th>
<th>Measurement</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athanassiou, Green, Tzoumakis, Whitten, Laurens, Harris, &amp; Dean</td>
<td>2023</td>
<td>New South Wales Child Development Study (NSW-CDS) (Australia)</td>
<td>72,771 children (37,659 boys and 35,112 girls) and their parents</td>
<td>Police contact data</td>
<td>A cohort of children who was born between 2002 and 2005 and whose birth registered in the state of the New South Wales Child Development Study (NSW-CDS) in Australia</td>
</tr>
<tr>
<td>Connolly, Schwartz, Jackson &amp; Beaver</td>
<td>2018</td>
<td>National Longitudinal Survey of Youth 1979 (NLSY79) and National Longitudinal Survey of Youth 1979 Children and Young Adults (CNLSY)</td>
<td>3,423 females and their 6,482 children</td>
<td>Self-reports</td>
<td>A nationally representative sample of 12,686 males and females aged 14 to 21 years old in 1978</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Dataset</td>
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</tr>
<tr>
<td>Frisell, Lichtenstein &amp; Långström</td>
<td>2011</td>
<td>The Multi-Generation Register data (Statistics Sweden)</td>
<td>12.5 million individuals (including biological and adoptive parents)</td>
<td>Crime Register data on all convictions between 1973 and 2004</td>
<td>Everyone living in Sweden at any time since 1961 and born in 1932 or later</td>
</tr>
<tr>
<td>Hjalmarsson &amp; Lindquist</td>
<td>2012</td>
<td>Stockholm Birth Cohort Study (SBC)</td>
<td>15,117 individuals (7,719 men and 7,398 women), and their fathers</td>
<td>Administrative crime records</td>
<td>All children born in 1953 and residing in Stockholm in 1963</td>
</tr>
<tr>
<td>Jahanshahi, McVie &amp; Murray</td>
<td>2021</td>
<td>Growing Up in Scotland (GUS) Study</td>
<td>1,961 children and their mothers</td>
<td>Self-reports</td>
<td>A birth cohort of pre-adolescent children who were born in Scotland in 2005 or 2006</td>
</tr>
<tr>
<td>Kendler, Ohlsson, Morris,</td>
<td>2015</td>
<td>Multiple Swedish national wide</td>
<td>3,257,987 individuals (including mothers, fathers, possible stepmothers and stepfathers)</td>
<td>Crime Register data on all convictions from 1973 to 2011</td>
<td>All individuals in the Swedish population born in Sweden between 1960 and 1990</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Dataset</td>
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<td>Measurement</td>
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<tr>
<td>Sundquist &amp; Sundquist</td>
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<td>registries and healthcare data</td>
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<tr>
<td>Ting, Xu, Chu, Lai, &amp; Li (2022)</td>
<td>2022</td>
<td>Intergenerational Transmission of Criminality and Social Disadvantages (INTRACS) research program (Singapore)</td>
<td>93,829 parents (41,683 fathers and 52,146 mothers) and their 183,015 children (94,108 sons and 88,807 daughters)</td>
<td>Official conviction records</td>
<td>242,620 individuals who were born in the 1965, 1970, 1975, 1980, and 1985 birth cohort in Singapore and had children who were aged 7 years and above at the start of study</td>
</tr>
<tr>
<td>Tzoumakis, Whitten, Piotrowska, Dean, Laurens, Harris &amp; Green</td>
<td>2020</td>
<td>New South Wales Child Development Study (NSW-CDS) (Australia)</td>
<td>91,635 children and their parents</td>
<td>Police contact data</td>
<td>A cohort of children who participated in the AECD teacher-reported survey at about age 5 years and/or the 2015 Middle Childhood Survey at about age 11 years</td>
</tr>
<tr>
<td>Van de Weijer</td>
<td>2022</td>
<td>Register data of Statistics Netherlands (Netherlands)</td>
<td>1,155,771 individuals</td>
<td>Police data</td>
<td>1,201,619 individuals who were born between 1996 and 2002 in Netherlands, and were</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Dataset</td>
<td>N</td>
<td>Measurement</td>
<td>Selection</td>
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<td>selected from register data of Statistics Netherlands.</td>
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Chapter 3

Methodology

3.1. A description of the Cambridge Study in Delinquent Development (CSDD)

The Cambridge Study in Delinquent Development (CSDD) is a prospective longitudinal study that has followed 411 London boys from age 8 to 61 (Farrington, 2021). The study began in 1961, and Professor Donald J. West directed it for the first 20 years. Professor David P. Farrington, who joined Professor West to work on it in 1969, has directed it since 1982. The latest interviews were conducted in collaboration with Professor Jeremy W. Coid. The results of the study can be found in six books by West (1969, 1982), West and Farrington, (1973, 1977), Piquero et al. (2003), and Farrington et al. (2013), and in eight summary papers by Farrington (1995, 2003b, 2019, 2021), Farrington et al., (2009), Farrington (2021), and Farrington and West (1981, 1990). For the sake of clarity, the original 411 males are referred to as generation 2 (G2), their biological parents as generation 1 (G1), and their biological children as generation 3 (G3). In addition, the G2 males’ female partners are referred to as G2F, their G1 female parents (their mothers) as G1F, their G1 male parents (their fathers) as G1M, their G3 female children (their daughters) as G3F, and their G3 male children (their sons) as G3M.

3.1.1. Participants

When the 411 G2 boys were first contacted in 1961-1962, they were living in a working-class inner-city neighbourhood of South London. The sample was chosen by taking all the boys who were then aged 8-9 and on the registers of six state primary schools within a one-mile radius of a research office that had been established. In addition to 399 boys from these six schools, 12 boys from a local school for children having special educational needs were also included in the sample in order to make it more representative of the population of boys living in the area. Hence, the boys were not a probability sample drawn from a population but rather a community sample of boys of that age in that area at that time. The boys were most commonly born in 1953.
Of the initial 411 boys, 357 boys (87% of the sample) were of British origin and white in appearance, in the sense that they were being raised by parents who had themselves been raised in England, Scotland, or Wales. Of the remaining 54 boys (13% of the sample), 12 were African-Caribbean, having at least one parent of usually West Indian or African origin. The other 42 boys were of non-British origin and white: 14 had at least one parent from the North or South of Ireland, 12 had parents from Cyprus, and the other 16 boys were Caucasian, having at least one parent from another Western industrialised country (Australia, France, Germany, Malta, Poland, Portugal, Spain or Sweden) (West, 1969).

For nearly all the boys (94 per cent), the family breadwinner at that time was usually their father with a working-class occupation (i.e., skilled, semi-skilled, or unskilled manual workers). Most of the boys were from conventional two-parent families with both a father and a mother figure: at age 8-9, only six per cent of the boys had no father figure, and only one per cent had no mother figure. Therefore, these boys represented a traditional white, urban working-class sample of British origin.

### 3.1.2. Procedure

**Interviews with the G2 males**

The G2 males have been assessed nine times, at ages 8, 10, 14, 16, 18, 21, 25, 32, and 48. When they were at ages 8, 10 and 14, they were tested in their schools by psychologists. The tests in schools measured individual characteristics such as intelligence, attainment, personality, and psychomotor impulsivity. At ages 16, 18 and 21, they were interviewed in a research office and in their homes at about 25, 32 and 48 by young social science graduates. The data obtained from these interviews included information on living circumstances, employment histories, relationships with females, illnesses and injuries, and leisure activities such as drinking, fighting, and drug use. On all occasions except at ages 21 and 25, the aim was to interview all the G2 males who were still alive, and it was always possible to interview a large proportion. For example, 405 (99%) at age 14, 399 (97%) at age 16, 389 (95%) at age 18, 378 (94%) at age 32, and 365 (93%) at age 48. At age 48, 365 out of 394 G2 males were interviewed: 17 males had died, 5 could not be traced, and 24 refused (Farrington et al., 2006). At age 21, only about half of the G2 males were interviewed, and about a quarter were at age 25. This was due
to the lack of funding. In addition, teacher questionnaires were completed when the males were aged about 8, 10, 12, and 14 years. These questionnaires provided data about their troublesomeness and aggressive school behaviour, their lack of concentration or restlessness, their school attainments, and their truancy. Ratings were also received from their classmates when they were in primary school at ages 8 and 10 about topics such as their daring, dishonesty, troublesomeness, and popularity.

**Interviews with the G2 females**

Interviews with the wives or female cohabitees of the G2 males were carried out when the G2 males were aged 32 and 48. Of the G2 males who were interviewed at age 32, 289 out of 378 G2 males were living with a wife or female cohabitee (76 per cent), and 268 of these G2 females (93 per cent) filled in a questionnaire about childrearing. Of the G2 males who were interviewed at age 48, 299 out of 365 G2 males (82 per cent) were living with a female partner, and 254 of these G2 females (85 per cent) were interviewed. This interview included information about childrearing, health and family violence (Theobald & Farrington, 2012).

**Interviews with the G1 parents**

Interviews with the G1 parents were conducted by female social workers in the G1 parents’ home about once a year from when G2 boy was about 8 until when he was aged 14-15 and was in his final year of compulsory education. The key informant was the mother, although many fathers were also involved in the interviews. These interviews were carried out to acquire in-depth information regarding the boy’s daring or nervousness, family income, family size, their employment histories, their childrearing practices (including attitudes, discipline, and parental disharmony), their history of psychiatric treatment, their degree of supervision of the boy, and his temporary or permanent separation from them.

**Interviews with the G3 children**

Between 2004 and 2013, attempts were made to interview the biological children of the G2 males. These interviews were conducted over a 9-year period due to intermittent funding. There were 691 G3 children whose names and dates of birth were known. Only children aged at least 18 (born up to 1995) were targeted. In order to meet the ethical standards of the South-East Region Medical Ethics Committee, the researchers were required to seek the consent of G2 males or their female partners for participation of the G3 children. Of the 691 G3 children,
38 (5.5 per cent) were not eligible to be interviewed: 20 children whose fathers refused, 7 children whose fathers were dead (and where no female partner was available), 6 children who had died, 3 who were disabled (one Down’s syndrome, one mental health problems, one severe attention deficit-hyperactivity disorder), and 2 who did not know that the G2 male was their father. Of the 653 eligible G3 children, 551 were interviewed (84 per cent) at an average age of 25; 291 of the 343 G3 males and 260 of the 310 G3 females. Of the remaining 102 G3 children, 39 children refused, 33 parents refused, 13 children could not be traced, 14 were elusive, and 3 were aggressive or problematic. Of the 29 eligible children living abroad, 17 were interviewed by telephone.

3.1.3. Measures

Criminal convictions

Offending was measured using official criminal records that were searched from age 10 onwards (the minimum age of criminal responsibility in England). Searches were done in the central Criminal Record Office (CRO), National Identification Service (NIS) and from 1995 in the Police National Computer (PNC) to try to locate findings of guilt of the G2 males and their biological relatives. The CRO, NIS, and PNC contain records of all relatively serious offences committed in Great Britain or Ireland. In the case of 18 G2 males who had emigrated outside Great Britain and Ireland by age 32, efforts were made to search their criminal records in the eight countries where they had settled, and searches were actually conducted in five countries. Two emigrated males were counted as not at risk of conviction because they emigrated permanently before age 10 and were not searched abroad. Because most males did not emigrate until their twenties, and because the emigrants had rarely been convicted in England, it seems likely that any convicted males were almost recorded.

Convictions were only counted for “standard list” offences covering more serious types of offences, thereby excluding minor crimes such as common assault, traffic infractions, and simply drunkenness. The most usual offences included were theft, burglaries, unauthorised taking of vehicles, although there were also a few offences of violence, vandalism, fraud and drug abuse (Farrington et al., 2006). The definition of what is a “standard list” offence changed over time. Common assault, as an example, was added to the standard list in 1995, drunk
driving in 1996, and being drunk and disorderly in 1997. All of these types of offences were counted. In order to avoid reliance on official records, self-reports of offending were also collected from the G2 males at every age from 14 onwards, by asking them about offences that they had committed, which had not come to the notice of the police (Farrington, 1989).

The age at which an offence was committed was used to record the age of offending. The age at conviction may be different from the age at offending due to time delays between offences and convictions. If the age of offending was unknown, the conviction age was used. Offences are defined as acts leading to convictions, and only offences committed on different days were counted. This rule was adopted so that each offence was based on a separate incident; if all offences had been counted, the number of offences would have been greater than the number of criminal incidents, resulting in an overestimation of criminal behavioural acts (Farrington et al., 2006). Where two or more offences were committed on the same day, only the most serious one was counted. The most serious offence was defined as the one which received the most severe sentence or – where sentences were equal – the one with the longest maximum sentence. This sometimes led to under-recording of separate criminal incidents on the same day. However, most court appearances were based on only one offending day; the 909 recorded offences up to age 56 corresponded to 826 separate occasions of conviction.

Repeated searches of criminal records were also conducted of the G1 parents, and later of G2 females, and of G3 children. G1 fathers were searched up to age 71 on average, and G2 males were searched up to age 56 (Farrington et al., 2013). Criminal records of the G3 children were searched in the PNC, in 2003, 2006, and 2011-2012. More than half were last searched between ages 25 and 33.

3.2. Mixed methods research

My thesis employs a mixed methods design involving the use of both qualitative and quantitative approaches. The two different methodological approaches represent different paradigms and are underpinned by different philosophical assumptions (Silverman, 2004). Some researchers argue that qualitative and quantitative approaches are so different that any attempt to mix them would “blend paradigms with incommensurable epistemological and ontological foundations” (Scott & Briggs, 2009:203). Qualitative approach is based on interpretivism and constructivism where it is of the view that reality does not pre-exist but
rather is constructed (Guzzini, 2000) and where the emphasis is on shared meanings (Myers, 2009). On the other hand, quantitative approaches are underpinned by positivism where reality is assumed to be objective and exists apart from human perception and consciousness (Crotty, 1998). These different paradigmatic assumptions emphasise the incompatibility of qualitative and quantitative approaches by raising questions regarding how to combine a perspective that supports subjective and value-laden research with a perspective that advocates objective, impartial, and value-free research.

However, other researchers have criticised the incompatibility assumption, arguing that mixed methods research is more than just a collection of research methods but involves the whole research processes by tying methods to an integrated set of methodological and philosophical assumptions (Creswell & Tashakkori, 2007). Supporters of mixed methods research provide a basis for using mixed methods design in a single study as a “third methodology” (Hall & Howard, 2008) or “third paradigm” (Denscombe, 2008). Capitalising on this, many theorists have suggested that pragmatism, as a philosophical choice to combine interpretivism and positivism, provides a suitable philosophical foundation for mixed method research (Johnson & Onwuebuzie, 2004; Teddlie & Tashakkori, 2003). Pragmatists argue that mixed methods research focuses on “what seems to work” best in order to answer research questions rather than concepts like “truth” and “reality” (Tashakkori & Teddlie, 2010). They contend that mixed methods research is complementary to traditional quantitative and qualitative research (Johnson & Onwuebuzie, 2004; Tashakkori & Teddlie, 2010). The process of combining qualitative and quantitative approaches is said to be effective in in taking advantage of the strengths of each approach whilst minimizing their weaknesses (Sale et al., 2002). In this sense, mixed methods research can provide better opportunities to answer research questions than either approach alone (Teddlie & Tashakkori, 2003; Creswell & Plano-Clark, 2007). Moreover, mixed methods research can be conducted for cross-validation or triangulation purposes (Saunders et al., 2009) – using different approaches for collecting data within a single study to look at the same phenomenon in order to increase reliability and validity of research findings and obtain a more complete picture of the phenomenon under investigation (Ihantola & Kihn, 2011). Mixed methods research can also be conducted in a way that strengthens research findings by checking on findings from one method with findings reached by the other method (Sales et al., 2002 Molina-Azorin, 2016).
Practically for my thesis, a pragmatic position allows me to focus on ways of combining qualitative and quantitative research methods in the overall research process. Using a mixed methods design enables data collection and analysis by using not only numerical data for quantitative research, but also descriptive data for qualitative research in order to address the research questions and goals of my thesis. My choice of using mixed methods design reflects a desire to make use of the unique strengths of both qualitative and quantitative research methods while simultaneously alleviating the limitations of using a single method. The mixed methods design adopted in my thesis is therefore considered a strength in answering questions regarding the complex phenomenon of intergenerational transmission of criminal behaviour from an-in-depth qualitative description of families of criminal and noncriminal children as well as the relationship between measurable variables, such as parents’ criminal behaviour as a predictor variable and children’s criminal behaviour as a outcome variable, and risk factors for criminal behaviour.

3.3. Qualitative case study research

My thesis focuses on the case histories of a sample of eight CSDD families of three generations by using data obtained through qualitative prospective in-depth interviews. The following section briefly reviews some recent studies that have done case study research. This will be followed by a description of research design and data analysis for my thesis.

Several criminological studies have utilized in-depth qualitative data to advance criminological insight into the intergenerational transmission of criminal behaviour. These studies have sought to illustrate the complex pathways involving intergenerational transmission of criminal behaviour. Their focus on detailed accounts of the lives of offenders and their families provides an opportunity to qualitatively describe how and why processes of intergenerational transmission of criminal behaviour occurs. Berckmoes et al. (2017) examined the intergenerational transmission of violence in Burundi, where consecutive generations of young people have participated in ethnic and political conflict. They conducted an in-depth analysis of caregivers and children from 74 vulnerable households through the five-month follow-up interviews with primary caregivers and children aged 8-18. They found that harsh and neglectful caregiving was responsible for the reproduction of violence within the same family. Similarly, affectionate caregiving helped to protect children from reproducing violence.
In another qualitative study of highly disadvantaged New York families, Dunlap et al. (2002) presented a case study examining the intergenerational transmission processes of drug abuse/sales, sexual exploitation, and violence across four generations of one family. They tracked the lives and relationships of 40 women and their household members and explored how four generations of women led lives punctuated by drug abuse/sales, sexual exploitation, and violence. They found support for social learning mechanisms, since the qualitative interviews with women showed that they tended to learn conduct or behavioural norms from their parents, leading to the familial perpetuation of drug abuse/sales, sexual exploitation, and violence across generations. Their learned conduct or behavioural norms were also found to lead them to exhibit problems in other areas of their life, such as unemployment, educational failure, family dissolution, and criminal behaviour. Williams and Godfrey (2015) collected 65 years of data (from 1850 to 1914) in order to examine possible mechanisms underlying intergenerational transmission of offending across generations residing in Liverpool and in the north-west England. Using prison- and court-generated data, they explored histories records to reconstruct the lives of criminal individuals and their families over generations. The qualitative data complies information on three generations of three families, taking as a starting point of generation 1 (G1) who had committed at least five criminal offences between 1880 and 1890. The data showed that direct transmission of offending occurred when parents acted as poor role models for their children and lacked in interest in their children’s education. Indirect transmission also occurred through continuity in exposure to environmental/socio-economic deprivation faced by families in poverty.

Contrary evidence for this has been provided by several studies with a focus on the intergenerational transmission of serious forms of crime, such as organised crimes. For example, in an analysis of case histories of 25 organised crime offenders and their 48 children (aged from 19 to 33) in Amsterdam, Van Dijk et al. (2019) investigated mechanisms underlying intergenerational continuity and discontinuity in organised crime families. The qualitative data they used was collected from police files, justice department files, and child protection service files. They developed case descriptions and constructed timelines of the family’s lives, in order to examine more in depth which events or factors seemed to account for patterns of intergenerational continuity and discontinuity. The in-depth analysis showed that most children of organised crime offenders did not experience material deprivation and poverty – indeed, some children were even wealthy and financially privileged. By contrast, many children
experienced more severe forms of trauma in childhood than children of general offenders, such as the contract killing of their father, being witness of a police raid, a shooting, or having a suicidal mother. They suggested that the children’s traumatic experiences accounted for the intergenerational transmission. They also mentioned that self-fulfilling prophecy and labelling acted as risk factors for the children to follow in their fathers’ footsteps but seemed to be less helpful in explaining continuity than ‘getting away with crimes’ (p. 358). On the other hand, the in-depth analysis showed that children of organised crime offenders seemed to have developed prosocial attachments, such as marital relations and stable employment, but these did not help greatly in explaining discontinuity. Similarly, Spapens and Moors (2020) conducted an in-depth study of seven Dutch criminal families, with at least one organised crime offender in one of the four generations. The qualitative data they used in the study consisted of local and regional archives, interviews with practitioners who had been involved with the families, information from police files, and the population registration database, and it complies information on four generations, taking as a starting point of the generation which produced an organised crime group leader. The data revealed a range of risk factors at the individual, family and social environment levels that contributed to the participation in crime over generations. The data also showed that members of seven organised crime families tended to favour partners and friends with criminal histories, who largely come from their social and professional circles, suggesting that both assortative mating (for females) and assortative friendships (for males) to be of key importance in explaining the participation in crime over generations.

Zara and Farrington (2016b) have done on the life course of chronic offenders, who had committed at least 15 convictions. They presented the case histories of a sample of eight CSDD chronic G2 offenders, each of which was introduced with descriptions of the offenders, their mothers and fathers, as well as all manners of transitions of their lives, including their childhood, adolescence, and adulthood. The eight cases of chronic offenders illustrated criminogenic risk factors and processes that played a role in the onset, development, and maintenance of their antisocial lifestyles. They concluded that the eight chronic offenders were entrapped in recurrent life ‘failure’ (p. 136), of which crime was only one element of an antisocial and deviant lifestyle, including drinking, drug abuse, school failure, unemployment, gambling, and sexual promiscuity. Although they focused on data on chronic offenders of two generations, only chronic offenders and used data only for two generations, the findings
contributed to knowledge about the psychology of chronic offenders through the exploration of both their criminal careers and their life stories.

All the studies reviewed, however, provided limited insight into how processes of intergenerational transmission occur. Some of the studies did not pay particularly attention on intergenerational continuity, as they based their selection on the criminal behaviour of the family in general, not on the criminal behaviour of the generation. These studies remain limited to comparisons of individual parents with their children. No attempt has been made to make comparisons between generations at comparable stages of life, comparisons between the entire parents’ generation and the entire children’s generation using identical measures, or comparisons of criminal versus non-criminal individuals within families. My thesis is in that way a unique step in further developing and addressing key underlying mechanisms by using in-depth qualitative data.

3.4. Plan of analyses

My thesis aims to investigate the intergenerational transmission of crime across three generations based on analyses of both quantitative and qualitative data from the CSDD. I will adopt a mixed-methods approach by applying two different analyses: 1) quantitative statistical analyses to explore intergenerational patterns of criminal behaviour; and 2) qualitative case history analyses to closely examine how criminal behaviour is transmitted across generations.

3.4.1. Qualitative case history analyses

Design

The qualitative case history analyses in my thesis continue and extend the method used by Zara and Farrington (2016b). What makes this qualitative case history analyses unique and distinct from the book by Zara and Farrington (2016b) is that it focuses on offenders in general not on chronic offenders and uses data on both criminal and non-criminal G2 males from three generations. It is designed to present a qualitative description of how and why they cycle of criminal behaviour within families can be repeated or broken.
Case selection

The first attempt to select the cases for in-depth analysis was to determine, out of the 411 G2 males, how many G2 males were interviewed at age 32 and 48 and had G3 children. Excluding 58 who were missing at age 32 or 48, 353 G2 males were interviewed at age 32 and 48. Of the 353 G2 males, 262 G2 males had G3 children, and 91 did not have G3 children. Next, I attempted to identify, out of the 262 G2 males, how many G2 males had G3 children who were both searched and interviewed. 201 G2 males had G3 children who were both searched and interviewed, and 61 had G3 children who were not. I then excluded seven G2 males whose family was rated as non-cooperative at age 8. It is important to consider the cooperativeness of the G2 male’s family as this would affect the quality and completeness of the age 8-15 information. Of the 194 G2 males, 177 G2 males had their female partners or wives who were interviewed, and 17 had males had their female partners or wives who were not interviewed. Among the 177 G2 males, there were three pairs of brothers. Hence, in order to avoid selecting the same family more than once, one male from each pair of brothers was excluded, leaving 174 G2 males in total. When choosing one male from a pair of brothers, I retained a brother who had convicted G3 children if I had a choice between convicted and unconvicted G3 children. Otherwise, I chose a brother at random.

Next, based on the 174 G2 males of three generations, I created a table listing all the G1, G2, and G3 persons in each of the following four conviction categories: (1) convicted G1, convicted G2, and convicted G3 (CCC); (2) convicted G1, convicted G2, and unconvicted G3 (CCN); (3) convicted G1, unconvicted G2, and convicted G3 (CNC); and (4) unconvicted G1, convicted G2, and convicted G3 (NCC). Therefore, among the 174 G2 males, 17 fit into a CCC category, 23 into a CCN category, 7 into a CNC category, and 23 into a NCC category. It is important to note here that the convicted G1 can be a mother and/or a father, and the convicted G3 can be a son and/or a daughter.

Based on the table listing the G1, G2, and G3 persons, I started by selecting cases based on the number of convicted persons in a G1-G2-G3 family (e.g., a family with both convicted male and female in G1). I also tried to select a family with at least one or two convicted females, although this was not easy because fewer females were convicted in the CSDD. Following this selection process, I selected two families from each of the four
conviction categories, yielding eight families in total (see Table 3.1 below). I limited my in-depth analysis to eight cases due to the word limit.

| Table 3.1. Four categories depending on whether G1, G2, G3 was convicted or not |
|---|---|---|---|---|
| Category | G1 (Generation 1) | G2 (Generation 2) | G3 (Generation 3) | Number of CSDD cases |
| 1 CCC | Convicted | Convicted | Convicted | 2 |
| 2 CCN | Convicted | Convicted | Not convicted | 2 |
| 3 CNC | Convicted | Not convicted | Convicted | 2 |
| 4 NCC | Not convicted | Convicted | Convicted | 2 |
| | | | | Total 8 cases |

Data collection

The case histories are based on information in the CSDD files. Each case will be introduced with descriptions of the G2 males, their mothers, fathers, siblings, female partners, and children as well as all manners of transitions of the G2 males’ lives, including childhood, adolescence, young adulthood, and adulthood.

The information about the lives of the G2 males and their families, as for every CSDD man, was gathered at different times of their life development since the G2 males were 8-10. For example, the information about the G2 males’ childhood and teenage years was collected mostly through the interviews with their G1 parents from when the G2 males were age 8-10 until they were 14-15. The information about their adolescence, young adulthood, and adulthood was collected through the interviews with the G2 males when they were age 16, 18, 21, 32, and 48. More information about the G2 males’ adulthood was provided by the social and medical interviews using the CAGE, GHQ and PCL:SV assessments. The information about the lives of the G2 males’ parents (G1) was collected through the interviews with the G1 parents about once a year from when the G2 males were 8 until they were 14-15. The information about the lives of the G2 males and their G1 parents was supplemented with other sources collected from their teachers, peers, institutional, and criminal records. Moreover, the information about the lives of the G2 males’ female partners’ or wives was gathered through the interviews with the G2 males and their partners or wives when the G2 males were age 32 and 48. Finally, the information about the lives of the G2 males’ children (G3) was collected
through the interviews with the G3 children at the average age of 25 as well as through the interviews with the G2 males and their wives when the G2 males were age 32 and 48.

Procedure

I scanned all the original interview files of the eight G2 males and their family members and transcribed each of them verbatim into text documents for analysis. I read all the transcribed interviews several times over in order to familiarise myself with the data, get immersed into the data more deeply, and obtain a sense of the whole. This initial analysis allowed me to develop chronological timelines for events in each family members’ life, with a focus on the identification of specific factors or processes in their lives that may have contributed to familial resemblance of criminal behaviour. This task helped find connections and converging patterns or disconnections and diverging patterns in the families of both criminal and non-criminal individuals’ stories. Ultimately, the procedures allowed me to present the life stories of the eight CSDD families of three generations in chronological order, with the aim of providing a picture of the complexity of variables involved in the continuity and discontinuity of criminal behaviour across generations.

3.4.2. Quantitative statistical analyses

The statistical analyses are designed to address the following questions:

1. Do G1 (generation 1) convictions predict G2 (generation 2) convictions (G1-G2)?
2. Does the G1-G2 relationship vary according to whether or not G2 was separated from G1?
3. Do G2 (generation 2) convictions predict G3 (generation 3) convictions (G2-G3)?
4. Does the G2-G3 relationship vary according to whether or not G3 was separated from G2?
5. Do G1 (generation 1) convictions predict G3 (generation 3) convictions (G1-G3)?
6. Is the G1-G3 relationship significant when controlling for G2?
7. Does having a convicted G1 parent predict convictions of G2 males when controlling for G1 risk factors for G2 male offending? Which risk factors make the G1-G2 relationship nonsignificant? This is evidence that these are possible mediators of the
transmission from G1 to G2. The specific mediators may possible be individual, parental, child-rearing, or socioeconomic factors, and they are chosen in my thesis based on knowledge about risk factors that contribute to children’s conviction (Farrington, 2015).

8. Does having a convicted G2 parent predict convictions of G3 males when controlling for G2 risk factors for G3 male offending? Which risk factors make the G2-G3 relationship nonsignificant? This is evidence that these are possible mediators of the transmission from G2 to G3. The specific mediators may possible be individual, parental, child-rearing, or socioeconomic factors, and they are chosen in my thesis based on knowledge about risk factors that contribute to children’s conviction (Farrington, 2015).

**Statistical methods**

The odds ratio (OR) is used to measure the strength of relationship between G1 convictions (male and female from generation 1) and G2 convictions (male from generation 2) (G1-G2); between G2 convictions (male and female from generation 2) and G3 convictions (male and female from generation 3) (G2-G3); and between G1 convictions (male and female from generation 1) and G3 convictions (male and female from generation 3) (G1-G3). Logistic regression analyses are used to investigate whether G1 convictions (male and female) predict convictions of the G2 male when controlling for possible mediators, as well as whether G2 convictions (male and female) predict G3 convictions (male and female) when controlling for possible mediators.

Accordingly, my thesis qualitatively and quantitatively investigates the intergenerational transmission of crime across three generations and examines possible factors and processes underlying this transmission. My thesis then discusses how the qualitative case histories illuminate the results of the statistical analyses. This investigation allows for a more rigorous and integrative mixed explanation of how and why criminal behaviour in one generation is repeated in the next or not.
Chapter 4

A case study-based investigation of intergenerational transmission of criminal behaviour in three generations of the eight families from the Cambridge Study in Delinquent Development (CSDD)

Table 4.1. A list of eight CSDD case histories

<table>
<thead>
<tr>
<th>Case #</th>
<th>Category</th>
<th>G1</th>
<th>G2</th>
<th>G3</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>781</td>
<td>CCC</td>
<td>Convicted</td>
<td>Convicted</td>
<td>Convicted</td>
<td>4.1</td>
</tr>
<tr>
<td>020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.2</td>
</tr>
<tr>
<td>732</td>
<td>CCN</td>
<td>Convicted</td>
<td>Convicted</td>
<td>Not convicted</td>
<td>4.3</td>
</tr>
<tr>
<td>992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.4</td>
</tr>
<tr>
<td>081</td>
<td>CNC</td>
<td>Convicted</td>
<td>Not convicted</td>
<td>Convicted</td>
<td>4.5</td>
</tr>
<tr>
<td>813</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.6</td>
</tr>
<tr>
<td>680</td>
<td>NCC</td>
<td>Not convicted</td>
<td>Convicted</td>
<td>Convicted</td>
<td>4.7</td>
</tr>
<tr>
<td>104</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.8</td>
</tr>
</tbody>
</table>

The aim of the present analysis is to look at the qualitative case histories of a sample of eight CSDD families of three generations. The table above shows a list of eight CSDD families, falling into the following four conviction categories (CCC, CCN, CNC, NCC). Each case history will be described here to illustrate the lives of the eight CSDD men and their family members.

4.1. Case 781 Derek (CCC families)

The description of Derek’s family

Derek was born in 1953 and was the eldest child. His family was composed of two parents and four children, three boys and one girl. The family was poverty-stricken, living in a small, dilapidated house. The place was dirty, poorly furnished, and thoroughly neglected, and it was too small for the children, as they shared a room with separate beds. His mother complained about the poor housing conditions but clearly seemed to give up
4.1. Case 781 Derek (CCC families)

trying to cope with long ago. The family of Derek always lived in a state of persistent financial insecurity; when he was a baby, the family was put out on the street because of his father’s debts. His parents seemed very immature to take on parental responsibilities. While his father frequently walked out of the family, his mother lacked the ability to control the children. All the children displayed destructive problems, and there were always troubles with them.

Generation 1 (G1)

Derek’s mother (G1F) – Not convicted

Derek’s mother, who had not been convicted, came from a family of two children. She described her childhood as happy; she mentioned that she loved spending her time with her father, who shared a love of classical music. The relationship between her parents was a happy one, although they struggled over different parenting styles. While her father was a passive, warm-hearted man with a gentle nature, her mother tended to be cold and overprotective. When she was a child, she did very well at school; she was at the top of her class. After leaving school at age 14, she worked as a cashier for five years and did well in work. Since she was married at age 21, she had had several part-time jobs that always lasted only a short period of time, and she said that it was because she needed to care for her children.

Derek’s mother gave the impression of a depressed, neurotic lady. She admitted having suffered from depression, insomnia, lassitude, irritability, mental tension, and various phobia. She was very preoccupied with her own symptoms and thus unable to give her children safe and loving care. Derek’s mother neglected her children; she was indifferent to where they were going and when they went out, and her children always left home very dirty and shabbily dressed. She disciplined her children in harsh and inconsistent manners; she often shouted at them one day and overindulged them the next day. When they annoyed her, she became irritable and then lashed out, with either her slippers or a piece of firewood. She felt unhappy in her marriage. During the interviews, she gave an almost exclusively negative picture of her husband, who she thought was violent, drank heavily and did not support nor had a true love for the children. When Derek was 13, she began divorce proceedings on the ground of cruelty – there were some instances of physical cruelty and violence towards her and the children. However, she decided not to go ahead with this because of her husband’s
4.1. Case 781 Derek (CCC families)

Sudden illness. She was not convicted of any offences but admitted to having stolen a piece of meat from a supermarket at a time when the family was desperately short of money and had nothing to eat in the house. She was not detected but felt guilty about it. Derek’s mother, overall, appeared to live a fairly conventional and non-criminal life.

Derek’s father (G1M) – Convicted

Derek’s father, who had been convicted, came from a family of three children. No information about him was available because he was never seen in all interviews. His wife gave little information about his family; she only knew that his father died of cancer when he was 14, and after that, his mother lived with another man whom he hated. Derek’s father left school at age 12 and then served in the Navy (he lied about his age to enlist in the Navy) and the Police and subsequently in the Fire Service. He was married at age 25. He was restless, immature, spendthrift, and loath to accept his family responsibility. He tended to mount up heavy debts, drank heavily, and at times showed uncontrolled violence at home. He often lost his temper with his wife or his children, and when his children were naughty, he usually hit them with anything to hand, for example, a poker or a shovel. On one occasion, Derek stood naked in the yard whilst he beat Derek. However, if he was in a good mood, he let his children go unpunished for the same behaviour for which he previously hit. His response to the family seemed to be almost entirely dictated by his mood, and this was a fact of emotional instability in the life of his children.

Derek’s father had committed 2 official offences at age 13, both of which were theft. Since then, he had not committed any offence, according to his criminal records. However, he appeared to be problematic in many respects in his life, such as unemployment, heavy drinking, poor relationship quality, and violence. He changed his jobs many times, had many periods of unemployment, and was never in a hurry to find a job, and this was a major source of conflict with his wife. He seemed to be irresponsible, frequently walking out of his family and being totally disinterested in his children. The interviewer described him as violent, stubborn, rather childish character. At age 36, he was summoned to appear in court charged with assaulting a teenage boy who was swearing and interfering with his children. His wife also mentioned that he had stolen periodically but gave no further details. His tendency to be violent and deviant seemed to be high, making it likely that he would continue to live on the fringes of antisocial activities.
4.1. Case 781 Derek (CCC families)

Generation 2 (G2)

Derek’s siblings

Derek had three younger siblings, two brothers and one sister. Terrance was destructive at times and frequently involved in inappropriate behaviour at home and outside the home. At age 6, he stole money from his mother’s purse, and at school, he truanted very seriously. He kicked against authority for the whole of his school years and always found his way into many minor dangers. He was often harshly treated by his father; for example, the father often beat Terrence with the slightest thing or put his hands around Terrence’s neck. At age 18, Terrence was charged with indecent exposure and was placed on probation, but he denied this offence. Caden was a very aggressive and restless boy. He showed aggressiveness in imitation of his brothers, and the mother felt that he became as disturbed and difficult as his brothers. Caden was frequently involved in lying and stealing. He often took money and cigarettes from his mother and was always suspected of taking things at school. During interviews, he appeared to be bad-tempered at home, and the interviewer sensed that he tended to be picked by his brothers. Tilly was the youngest girl in the family, being attractive but very grubby. The mother spoke of Tilly with warmth and confidence about her future development and felt that Tilly was the brightest of her four children. All the boys showed signs of behaviour disturbances. They constantly quarrelled with one another, and the mother regarded them as beyond her control, which they were. The relationship between the boys was very uneasy.

Derek (G2M) – Convicted

Childhood

From an early age, Derek started bedwetting, stealing at home and outside, and having some nervous habits, such as nail biting. At age 5, Derek pilfered from school and also took money from his mother’s purse. At age 9, he started smoking and took many risks, such as dashing across the road, climbing into empty houses, and going up high, and he lacked concentration and interest in school. He was also extremely destructive, tearing sheets and wallpapers, smashing things, and breaking toys. At age 10-12, Derek’s level of antisociality and troublesomeness were high. At age 11, he pulled down the jeans of a six-year-old girl on the street, and at age 12, he was caught by his neighbours in the act of setting something on fire. In the same year, he was charged with larceny and was on remand for this.
4.1. Case 781 Derek (CCC families)

During his remand, he had petty quarrels and fights with his peers. He was of high average intelligence but had special learning needs, particularly with his reading. He had problems making friends; he was bullied and picked on by a gang of boys at school. At age 12-14, he self-reported frequent involvement in delinquent and violent activities, such as assaulting, stealing from elsewhere, and absconding from school. At age 15, he was charged with taking and driving away and was given a 12-month conditional discharge. The impression he gave was that of an aggressive, tough, and psychologically disturbed boy whose parents had difficulties in handling him and maintaining a consistent line of discipline with him. Derek seemed to be aware of these difficulties, which made it easy for him to exploit the situation. He continued to bite his nails and was sometimes enuretic at night, and his mother thought that this was probably due to his feelings of great insecurity. His childrearing was extremely poor, both materially and emotionally. His father was not usually around to discipline him but physically very harsh, which was likely to have had an influence on his own social adjustment. Derek was, for all his childhood, somewhat neglected and poorly supervised, with a lack of warmth, affection, and support, leading to his behavioural problems and maladjustment.

Adolescence

Derek spent four years at a boarding school for maladjusted children following his first offence of larceny at age 12. When he returned at age 16, his father deserted the family after long and persistent fights with his mother, and consequently, the family was financially more unstable, varying from week to week depending on whether the older boys were working. Derek started working at age 16 but changed his jobs many times. At age 17, he had a new job but was charged with stealing vacuum cleaners from his workplace and was sent to a detention centre for three months. Derek said that he did stealing “to get extra money to help the family”. At the time of the interview, he was unemployed. Derek drank heavily and regularly took drugs since age 15. He had 30 fights in the previous three years, some of which he used objects that were around like, for example, a piece of wood. His antisocial behaviour became prolific, and he committed different types of offences as a juvenile. The impression Derek gave to the interviewer was that he wished to be treated as an adult, albeit very immature, aggressive, lacking in any sense of responsibility, and prone to drift. His mother was afraid that Derek would turn out like his father, and there were signs of this in
4.1. Case 781 Derek (CCC families)

the way both regarded employments. Derek was extremely work-why, and his work record was irregular, with some intervals of short-term jobs. During the interviews, Derek tended to cover his feelings of insecurity and inadequacy with exaggeratedly uncouth and provocative behaviour, particularly towards his mother. However, he had quite a lot of intelligence and capacity to think about himself and things around, which was quite unusual. Discussing his adolescence, it emerged that he had suffered from his home situation, for having brothers who showed signs of behavioural problems and for having continual anxiety about money. The home situation was such that unless Derek could manage to maintain himself in steady employment, it would inevitably break down.

Young adulthood

When interviewed at age 22, Derek was working at a disco club. He went out every single evening of the week and continued to smoke, take drugs, and drink heavily. He had sexual intercourse with about 9 different girls and appeared in court twice in the previous two years, one for possession of illegal drugs and the other for shoplifting. He was still involved in fights, one of which was particularly vicious because the victim was seriously injured. During the interview, Derek was frank and outspoken when it came to his drug use and sex life. He was described by the interviewer as a very insecure, immature, and anxious young man who seemed to constitute barriers to assisting himself. Derek adopted a very casual attitude to life and continually lived as a “drop out”, but he had improved mainly due to threatened breach proceedings and a general tightening up regarding supervision.

He was re-interviewed at age 26. He was married at age 23 and had a 7-month-old daughter. He lived in a private-rented house with three bedrooms, and the house condition was good. He worked as an assistant gardener at school, and he was happy with this job. His social life was largely confined to his own home, which was completely different from the life he had previously. He spent his spare time gardening, decorating, and watching T.V. at home. He went out for a drink less frequently than before. Instead, he stuck to smoking cannabis. His level of antisociality decreased after he was married. He made attempts to control his antisocial behaviour, and he certainly had a group of friends who were non-delinquent types. He seemed to be able to avoid further trouble with the police as long as he managed to control his ever-present violent streak.
4.1. Case 781 Derek (CCC families)

Adulthood

When interviewed at age 32, Derek was living with his new partner and three children: two of them from his partner’s previous relationship and one from the relationship between them. He split with his wife at age 29, and his two children were living elsewhere. Derek got on very well with the children from his partner’s previous relationship and spent a lot of time with them, playing with them and getting them reading every morning. He said that they regarded him as their father, and he regarded them as his children. Derek came across as delinquent, although much of this was due to fights in which he had been involved. He was involved in two fights in the previous five years, one of which caused serious injury to victims by using an object that was around like, a broken glass. From the way he told it, the blame always rested with the other party, but the interviewer felt that he wanted to fight at least as much as he wanted to avoid fights. His tendency to get involved in aggressive incidents was strong, making it very unlikely that he could keep out of trouble, especially in fights.

Derek was re-interviewed at age 48. He again split up with his partner and had a new girlfriend. He still drank heavily, although he had gotten some professional help to reduce his drinking. He was very fond of drugs which he had a high tolerance to – and indeed, he had done a line of cocaine before the interviewer arrived. His criminal pattern was still alive, and since the last interview at age 32, he committed five different types of offences: indecent assault and affray at age 34, shoplifting at age 35, criminal damage at age 37, and assault at age 37. Derek described his childhood as unhappy, mentioning the harsh and strict discipline in the house, and very often being beaten by his father. He willingly described the upbringing he had at the hands of his violent father, but it seemed that he was still angry at his father but also wanted his father’s affection. He was certainly gregarious, but behind his sociability, there seemed to be loneliness and a desire for an intimate and close relationship. It seemed that Derek wanted to be close to people but also found it difficult not to reject them. His childhood was still having a considerate effect on him. Derek talked about many plans in his life, but there seemed only to emphasise how unstable his life was and how desperately he wanted to find some sort of peace. Again, his disturbed childhood had a devastating effect upon his adulthood. Like many of other delinquent-prone individuals, Derek had a complex life history. This meant that the residence, jobs, and social histories were not
4.1. Case 781 Derek (CCC families) 
as precise as they could be. Derek’s life was very complicated by his antisocial attitude and
behaviour, including heavy drinking, drug abuse, unemployment, sexual promiscuity, and
fights, but at the same time, Derek seemed to have “dropped out of society”. It seemed that
his life would be dogged by misfortune and unluckiness, some of his own making and some
unavoidable. His criminal career started when he was aged 12 and lasted until he was 48
years old. He was convicted of 18 offences, most of which involved stealing and assaulting.

Derek’s wife (G2F) – Not convicted

Siena, Derek’s wife, who had not been convicted, was interviewed when she was
38. When she was young, she frequently truanted, ran away from home overnight and stole
anything, but her behaviour was not particularly problematic. Siena was married to Derek at
age 20, and they had two children, one daughter and one son. Since she divorced him at age
25, the two children had lived with her and had not seen Derek for most of their lives. She
described Derek as having trouble controlling his anger and often getting into fights. She
also stated that Derek drank too much alcohol and consumed drugs heavily, which affected
their relationship. Nonetheless, she mentioned that after she split with him, she felt lost all
interest in things and even sometimes considered suicide, which might have affected her role
in raising her children at that time. Siena always knew where they went out and usually beat
the children if they misbehaved. The children exhibited antisocial behaviour; while her
daughter was caught by the police for shoplifting at age 8, her son was caught for stealing a
car at age 13. She admitted having sometimes had alcohol or drugs too much, but it did not
seem like a serious problem. She was not convicted of any offence, and she appeared to live
a conventional life.

Generation 3 (G3)

Child 1 (G3F) – Convicted

Serena, who had been convicted, was interviewed at age 26. She was working part-
time as a door supervisor at a football club, and she was very happy with this job. Serena
was not married, but she had been living with her boyfriend for five years, and they had a
three-year-old son. She saw herself not living with him in five years’ time because he was
addicted to cocaine and because they often had violent rows, which involved slapping or
hitting with something. When she was only three years old, her parents were divorced, and
she was raised by her mother and stepfather. She described her childhood as very happy; she
4.1. Case 781 Derek (CCC families)

mentioned that her parents (her mother and stepfather) got on very well with each other. During her childhood (under age 12), she often took many risks, like climbing and playing on railway tracks, and at school, she sometimes truanted from school. Before the age of 15, she behaved impulsively and often stayed out at night, and at school, she threatened, bullied, intimidated other children, and often initiated physical fights. After leaving school at age 17, she smoked, drank heavily, regularly took drugs, drove after drinking, and often got into fights. On one occasion, at age 19, she was arrested for beating someone up, but no charge was brought. She admitted having some sexual involvements with a man beside her boyfriend in the previous year. Serena committed one official offence at age 27, which was dishonest representation for obtaining benefit. Her level of psychopathy, measured by the PCL:SV, was 14, with a score of 7 points on the affective/interpersonal factor, and 7 on the irresponsible/antisocial lifestyle. This is a high score. Interestingly, despite virtually no contact between Serena and her natural father, Derek, over the years, the interviewer could certainly see the similarity between the two. Serena talked freely about her violence, explaining in each case that it was in defence of her partner/friends and in response to unprovoked rudeness. The way she recounted these stories with an air of amusement and justification reminded the interviewer particularly of Derek, who was interviewed about three years ago. Serena attributed her tendency to physical aggression to what she witnessed when she was young. She recalled an incident when she saw her father holding her mother down on the bed with his knee in her back, and there was blood on the windows and walls. Her aggressive behaviour might be derived from witnessing family violence during childhood, but at the same time, she might have inherited more than a few characteristics from her natural father – Derek. Serena also appeared to repeat her father’s drinking and drug use patterns in her own life, and it became an intergenerational problem.

Child 2 (G3M) – Convicted

Bennet, who had been convicted, was interviewed at his parents’ home at age 23. He was working as a vulcaniser, and he was happy with this job. His parents were divorced almost right after he was born, and he was raised by his mother and stepfather. Bennet described his childhood as happy, although he mentioned that his parents usually smacked him and very occasionally hit him, and the discipline he received was strict. His parents set too many rules, but they sometimes knew where he was going when he went out. During his
4.1. Case 781 Derek (CCC families)

Childhood (under age 12), many indicators of his antisociality were manifest from an early age – engaging in risky behaviour, threatening, bullying, intimidating other children, initiating physical fights, physically destroying other people’s property, and arguing with his teachers or neighbours. Before he left school at age 16, he usually truanted once a week, and he was suspended three times and expelled nine times. He had his first sexual intercourse at age 13, which was earlier than average. In his young adulthood, Bennet smoked, drank heavily, took drugs, and had active sexual relationships with numerous women. He frequently got into trouble – drug driving, careless driving, and fights. He took drugs from age 14 but stopped taking them because he felt it was too dangerous. However, it was unlikely that he would stop taking drugs in the future, as his drug taking was one of the highest of anyone in the study. Bennet committed three official offences, which were possession of drugs at age 20, four motor vehicle offences at age 26, and common assault and battery at age 27. The PCL:SV was administered to him; his level of psychopathy was 14, with 6 points on the affective/interpersonal factor, and 8 points on the irresponsible/antisocial lifestyle. This is a high score. Bennet seemed to have inherited more than a few characteristics from his natural father – Derek. This was despite virtually no contact with Derek, except on a few occasions at a bus stop when he was about 10 or 11. Bennet had a rather low opinion of Derek calling him an “old tart” who went out with girls half his age. However, like his father, Bennet seemed to have quite an aggressive streak which the interviewer saw when he shouted at his mother. He acknowledged this and mentioned that he had to try to keep it under control and that it was stronger at certain times of the day. Moreover, as with his sister, Bennet appeared to repeat his father’s drinking and drug use patterns in his own life, and this intergenerational transmission was more evident for Bennet than for Serena.
Birth of Derek’s mother (G1F)

1930
- Happy childhood
- Left school at age 14
- Married at age 21
- Parental harmony
- Gave birth to Derek at age 22
- Lost her father at age 24
- Poor physical, mental health
- Gave birth to Tilly at age 32
- Extremely destructive, Harsh, inconsistent discipline
- Marital conflict
- Poor vigilance
- Immature, irresponsible
- Heavy smoking
- Married at age 23
- Deserted his family at age 43
- Aggressive, psychologically disturbed
- Separated from his father
- Insecure, immature, anxious young man
- 9 more convictions between ages 15-23
- Heavy drinking, smoking, drug use
- Married at age 23

Birth of Derek (G2M)

1926
- Lost his father at age 14
- Had a son, Derek at age 27
- Serious debt problems
- Physical violence at home
- Heavy drinking
- Unstable job records
- Restless, immature, spendthrift
- Married at age 25
- Had a son, Terrence at age 28
- Very unstable, moody, harsh father
- Heavy drinking
- Unstable job records
- Described his family at age 43
- 9 more convictions between ages 15-23
- Heavy drinking, smoking, drug use
- Married at age 23

Birth of Derek’s father (G1M)

1926
- Lost his father at age 14
- Had a son, Derek at age 27
- Very unstable, moody, harsh father
- Physical violence at home
- Heavy drinking
- Unstable job records
- Restless, immature, spendthrift
- Married at age 25
- Had a son, Terrence at age 28
- Very unstable, moody, harsh father
- Physical violence at home
- Heavy drinking
- Unstable job records
- Described his family at age 43
- 9 more convictions between ages 15-23
- Heavy drinking, smoking, drug use
- Married at age 23
4.2. Case 020 Simon (CCC families)

The description of Simon’s family

Simon was born in 1953. He came from a large family of five children, three boys and two girls, and he was the second child. The family lived in an old self-contained council flat, which was very dreary both externally and internally. It was an overcrowded home; two rooms were shared by three boys and two girls, but it was not conspicuously dirty or neglected, as the mother was somewhat obsessed with the flat always being clean and tidy. The family of Simon was very pressed for money; the parents always had trouble paying the rent, and all the children had free school dinners. There was extreme tension between his parents, and they occasionally used physical violence against each other. While the father was irresponsible, often absent from home, and was not involved in the care of his children, the mother was completely inconsistent with her children, depending on her mood. The parents appeared to be variable in their attitude and unable to control the children. None of the children was bright, and his older brother had many school troubles. It was a pretty disturbed family where everyone showed signs of emotional or behavioural maladjustment and trouble with the law.

Generation 1 (G1)

Simon’s mother (G1F) – Convicted

Simon’s mother, who had been convicted, came from a large family of five children. She described her childhood as unhappy; she mentioned that her parents drank heavily and quarrelled violently, which was alarming for her. Her mother always went out to work and made the children to do the housework. She was the one who stayed at home and looked after the house. She left school at age 14 because she hardly went to school to take on household chores. She experienced parental indifference and neglect in her early life, and these experiences were likely to contribute to her emotional insecurity. She was married at age 17 and did not keep in touch with her family since. Simon’s mother appeared to be in very poor health, both physically and mentally. She suffered from chronic depression, extreme irritability, and general tension, and her mental health was in such a state that she was unable to provide proper care for the children. Due to her poor health, she was always in and out of hospital many times in Simon’s early life. She was fond of her children but undoubtedly lax and negligent in some respects and showed them very little affection. She always threatened them, slapped them, shouted at them, and nagged them. Her relationship
4.2. Case 020 Simon (CCC families)

with her husband was bad – they had frequent periods of not communicating, sleeping in separate rooms, and separating. She complained that he was always out and left everything to her. They often quarrelled violently; her husband threw plates at her, and there was evidence of this on the wallpaper, and he also gave her a black eye. At age 43, when Simon was 15, she deserted the family after arguing with her husband. Simon’s mother had committed 5 official offences, all of which were property offences committed for monetary gain. Her first offence was other theft when she was aged 17, and she committed the rest of four offences when Simon was between ages 11 and 17. At age 39, when Simon was 12, she was even imprisoned for larceny for 4 weeks. During the time of her imprisonment, Simon and his older siblings were left at home without adult supervision, while his younger siblings were received into care. Simon’s mother died in a mental hospital at the early age of forty-eight.

Simon’s father (G1M) – Convicted

Simon’s father, who had been convicted, came from a large family of 9 children. He had an unhappy childhood; his parents were addicted to alcohol, got on badly with each other, and had frequent violent conflicts. He did not receive enough attention from his parents, and he said that he always felt unwanted in the home. His school report was poor, and he left school at age 14. He left home at age 18 and served in the army for one year. Since he was discharged from the army at age 19, he had been working as a long-distance lorry driver for 20 years. He was married at age 28. Simon’s father was the sort of person who ran away from problems in the family leaving his wife to cope with. The control of the children was solely in the hands of his wife, which he thought was a woman’s job. He showed an irresponsible attitude in that he was never at home and went out most evenings of the week at pubs or betting shops. He had the habit of withdrawing from the family, and this seemed to be his way of coping with difficulties. Nevertheless, when interviewed in 1966, the interviewer reported a happy domestic scene between him and the children without his wife present; all engaged in drawing or reading around the fire. The whole atmosphere was much calmer than when his wife was at home. There was clearly a genuine affection between him and the children, and it seemed that his long absences from home were more escapist from his wife than any lack of interest in the children. He certainly seemed to have influence with them, but perhaps the difficulty was that he was away too often. He was firm but gentle
4.2. Case 020 Simon (CCC families)

with the children, and he did not generally find any need to punish them as they did as they
were told. His relationship with his wife was bad, and he was violent to her on more than
one occasion. He described himself as a lonely, friendless person but with no need for his
wife’s company. Simon’s father committed 1 official offence at age 20, which was theft of
vehicle, and he did not commit any further offence. He died at age 77.

Generation 2 (G2)

Simon’s siblings

Simon had four siblings, two brothers and two sisters. Ban, Simon’s older brother,
had had a history of family separation since early childhood. Due to circumstances at home,
when he was a baby, he was sent to live with his maternal grandmother until he was four. At
age 9, he was sent to a residential open-air school until he was 11, due to asthma. From an
early age, he had severe truancy problems, and between ages 12 and 16, he appeared in court
six times charged with different offences, such as larceny, shoplifting, breaking and entering,
being a suspected person, and being a passenger in a stolen vehicle. He acted in a disrupted
way, being rude and uncooperative with his parents. Ban started working at age 15, but there
were many difficulties and rows at work. Ban continued to show signs of hardened
delinquency – very anti-authority, cynical, tough, and independent – throughout his young
adulthood. Sarah, Simon’s younger sister, apparently presented no particular problems,
except that she had soling problems at age 10. She did quite well at school and was interested
in her schoolwork. She left school at age 15 and started working at a retail store. Daniel,
Simon’s younger brother, was an aggressive, impulsive boy who took many risks. He liked
frightening other boys and was not afraid of getting into fights with other boys. He behaved
in a wild and uncontrolled way and indulged in climbing and other adventurous things. He
seemed to be going the way of Ban, and his mother undoubtedly expected troubles from him.
Jasmine, Simon’s young sister, was a clinging and insecure child who was very tied to her
mother and always slept with her mother. She was taken to a clinic for screaming and being
very disturbed at age 3.

Simon (G2M) – Convicted

Childhood

Simon was a placid boy, being exceptionally easy and shy in temperament. At age
10, Simon had a very bad attendance record, but he was not aggressive and did not get
4.2. Case 020 Simon (CCC families)

involved in fights or bad behaviours. His teachers found him insecure and anxious, certainly not working up his I.Q. of 89, and he was not a good mixer. He was not timid with his teachers, but with his mother because she always shouted at him and threatened him a lot. At age 11, he had no real friends and spent a lot of his time indoors. At age 12, he was noted to have nervous disturbances – shy, very sensitive, and worried inwardly. He gave the impression that he wished to be accepted by everyone and wished to be cared very much that his mother did not care what he did. He started stealing and getting involved with some delinquent friends. Simon and his friends stole cash from a newspaper boy and were given a 12-month conditional charge. At age 14, Simon was again charged with housebreaking and received 2 years’ probation. He acted as a lookout whilst two other boys entered a flat and stole things. At school, his attitude to his teachers, on the whole, was good, but he was easily provoked and lacked concentration in all work that required mental effort. Simon seemed to make a great effort to stop his shoplifting, but his family had very little in the way of things to keep him out of trouble. Throughout his childhood, it seemed that he was in minor trouble and that his behaviour did not give rise to serious concerns, despite the emotional and social instability of his family situation. Discussing his childhood, it emerged that he suffered from his problematic home situation, for having an old brother who showed signs of serious delinquency, for having a depressed mother and an irresponsible father. It was very likely that he could resort to delinquency if he was not guided along the right paths.

Adolescence

At age 15, Simon’s home condition remained very much the same – quarrels and turbulence, and his mother was undoubtedly lax and negligent, and she leaned on him for emotional support. This caused much unrest and anxiety to him. Simon was happy at school, and the only problem was that he was picked on by other boys. He left school at age 15 and started working as a van boy. Simon appeared to be a trouble-free boy who was not delinquent but was nevertheless at risk in his environment. At age 16, his mother left home after arguments with his father four months before the interview, and he did not even know where she was. He said that he felt better after she was away. His younger sister, who was quite helpful, seemed to have stepped into her shoes and run the household. Amid all this, Simon appeared to be a pleasant and mild-mannered boy, obviously very limited in his capabilities and potential. He showed signs of difficulties – he disliked having to talk about
4.2. Case 020 Simon (CCC families)

his parents’ troubles. He seemed to get upset by his parents’ ensuring quarrels but also seemed mature enough to accept this situation with less anxiety. However, at age 18, he found it difficult to manage to keep himself out of trouble. He spent most of his time at pubs with his mates, taking drugs, drinking, and smoking. He externalised his aggressiveness; he admitted having been involved in fights and other disorderly acts, including smashing windows of telephone boxes and slot machines, which he found to be fun. Since leaving school, he had had three jobs, each of which only lasted a short period. He stated that he left his jobs because he just got fed with the people or the job. All his problems seemed to be due to his very poor home background.

Young adulthood

Simon’s mother died in a mental hospital a few weeks before the age 21 interview. At the time of the interview, Simon was unemployed. He said that he packed in his job that he had worked for 2 years. He appeared to avoid hard work, but at the same time, he wished to earn much more money. Simon smoked heavily, drank a lot, and gambled, but he had no debt problems yet. His aggressiveness and antisociality continued to be high. He admitted having spent all his time going to the pub with a group of four or more mates, all of whom had served time in prison, and doing things which led him into trouble with the police. Simon got into numerous fights in the previous two years, one of which he used a bottle that was around. He also assaulted a policeman and was fined. He grabbed the policeman by the throat and pushed him in the face, and the policeman was taken to the hospital. At age 22, Simon and his friends were charged with taking a motoring vehicle without consent, and at age 25, he was again charged with assault. He entered a public house and squeezed a woman’s neck behind the bar, which caused swelling and bruising. Simon was well aware of his antisocial behaviour, including some robbery, burglary, and shoplifting. When asked to say something about it, he said, “When I get drunk at night, I might go and rob someone’s house”. It seemed that his drinking contributed to his involvement in antisocial behaviour. When interviewed at age 25, Simon was working as a casual labourer and living with his fiancée and her mother. The impression Simon gave was of being cooperative, frank, and open in sharing information about his life. However, at the same time, he seemed to exaggerate his fights, such as the number of fights he was involved in, and underplay the ‘viciousness’ of them.
4.2. Case 020 Simon (CCC families)

Adulthood

At age 32, Simon’s work records were stable; he had had two jobs in the previous five years, and he was usually in one job for more than three years. Simon was married at age 25, and he was living with his wife and three children, the oldest from his wife’s previous relationship and the two from his relationship with his wife. All the children had some behavioural problems, such as temper tantrums, disobedience, fights, truancy, and lying. Simon and his wife usually smacked the children if they misbehaved, and they always knew where the children were going and when they went out. He got on very well with his wife, apart from some rows characterised by shouting episodes. Simon still smoked, drank, gambled, and got into fights, but much less than before. He was involved in only one fight in the previous five years – at age 26, he punched a man in the pub to help his brother who was in the fight. He said that he did it for self-exculpation and there was nothing wrong with it. Other than that, Simon seemed to live a stable life.

Simon was re-interviewed at age 48. At the time of the interview, he was working as a college cleaner with his wife, and he was happy with this job. He was living out of London with his wife and middle child. The other two children got married and lived elsewhere. Simon reported that his older daughter was in contact with educational welfare at age 14 because of her truancy, and his younger son was involved in the police after he broke into a flat at age 14. What seemed to emerge from his accounts was a sort of intergenerational continuity of his childhood problems into his own children. Simon described his childhood as happy, although growing up in a problematic family where he experienced early parental separation and emotional neglect. He mentioned that his parents usually smacked him and sometimes hit him if he misbehaved, and the discipline he received was lenient. Simon continued to drink, smoke, and gamble, although not as much as in previous years. His involvement in fights seemed to be the same as before; he committed three offences of assault between the ages 51 and 52. Although Simon said that he tried to keep out of fights, it was unlikely that he would stop fighting in the future. Simon committed 8 official offences, most of which were assault. His criminal career started when he was aged 12 and lasted until age 53. Simon came across as a very calm, unexcitable working-class man who was not excessively talkative and tended to rely on his wife for the answers to the questions. His home condition was poor, but Simon and his wife did not appear worried or discontented.
4.2. Case 020 Simon (CCC families)

about it. The impression Simon was of a man who took life as it came and never had any big plans for money or ‘success’.

Simon’s wife (G2F) – Not convicted

Kimberly, Simon’s wife, who had not been convicted, was interviewed at age 43. At the time of the interview, Kimberly was working as a college cleaner with Simon – together did the early morning shift. When she was young, she did not have any behavioural problems, except that she often stayed out at night without her parents’ permission and sometimes truanted from school before age 18. She left school at age 15. Kimberly met Simon through his sister and was married to him at age 21. She had been married once before and had a daughter from her previous relationship. Her daughter now settled elsewhere, with five children and another on the way. Kimberly described her relationship with Simon in positive terms, but she said that she often disagreed with him about what to do when the children were naughty and how to raise the children. Kimberly held the view that strict discipline develops a good character in children, which was different from that of Simon. Nevertheless, she described Simon as generally trusting and emotional stable. Kimberly appeared to be dominant in her relationship with Simon – it was her who arranged the interviews for Simon, and he seemed to be incapacitated in some way. However, it might be that she was more talkative and active than him. During Simon’s interview, Kimberly sat smoking intermittently and never appeared relaxed – sitting on the edge of the sofa. She was not willing to open up – being very cautious. She had absolutely no interest in the study at all – possibly the incentive of money was the only reason to do the interview. Kimberly gave the impression that she enjoyed alcohol. Kimberly had not committed any offence, and she did not come across as deviant.

Generation 3 (G3)

Child 1 (G3F) – Not convicted

Sophia, who had not been convicted, was interviewed at age 25. She had a three-year-old child from a previous relationship – she lived with her partner from age 20 but split up with him at age 22. She was living with her child in a private-rented flat near her parents’ place. She spent quite a lot of her time at her parents’ flat, where indeed, the interview was conducted. She had recently given up her job as a cashier assistant, which she stayed in for three months, to concentrate solely on bringing up her child. During her childhood (before
4.2. Case 020 Simon (CCC families)

age 15), she never engaged in risky behaviours, but she frequently truanted school and sometimes stole or shoplifted things. At school, she was a good student who learned well and liked volunteering. She left school at age 16. Sophia described her childhood as happy; she mentioned that she was brought up by her parents, who got on very well with each other, and the discipline she received was not very strict. When she misbehaved, her parents usually smacked her, and they set a lot of rules at home and always knew where she was going and when she went out. Sophia had not committed any offence until the age of 24. Her level of psychopathy, measured by the PCL:SV, was 1, with just one item scored on the irresponsible/antisocial lifestyle. Sophia appeared to be a bit of a problem regarding truanting from school and stealing from elsewhere in childhood and adolescence, but her problems did not persist or worsen over time. Although her parents enjoyed smoking and drinking, she never smoked and drank on occasion, which was quite surprising. Unlike her brother Andrew, Sophia seemed to grow in a family environment characterised by parental affection, parental harmony, and adequate supervision. It was possible that her early family life protected her from developing antisocial or aggressive traits, which could account for why Sophia was not convicted. During the interview, she was cooperative and truthful. However, she gave the impression of a woman who lived a parasitic lifestyle without realistic and long-term goals – spending most of her time at her parents’ place and letting her parents take care of her child. She admitted to having been living from day to day without a goal. When asked to describe herself, she said that she did not “think about things like that”. All in all, she was rather unambitious but nevertheless reasonably contented and happy.

Child 2 (G3M) – Convicted

Andrew, who had been convicted, was interviewed at age 27. At the time of the interview, he was a self-employed painter. He was living in a private-rented house with his partner and a six-year-old son. Andrew had another biological child (age 9) from a previous relationship, who was living elsewhere with his ex-partner. Andrew and his partner got on well with each other, but they had rows once a month, which included shouting and sleeping separately. They never hit their child but usually sent him to his room or put him into bed early if he was naughty. Although Andrew did not always agree with her about how to control him, he mentioned that their relationship could last because he believed that she was the only person he had ever been in love with.
4.2. Case 020 Simon (CCC families)

From an early age, Andrew showed signs of antisociality, such as fighting, noncompliance, and lying. During his childhood (under age 12), he often took many risks and frequently truanted. Since he left school at age 13, his level of antisociality became more evident. At age 14, Andrew was caught by the police, attempting to break into an empty flat with his friend. Since he was 15, he frequently got into fights in which he used weapons, such as a stick, a knife, or a gun. Andrew described his childhood as average, mentioning the strict discipline in the house, and often being hit or beaten by his father for no apparent reason. He stated that his father, Simon, always blamed him for everything. His parents were also indifferent to his whereabouts, and he was left without adequate supervision. These events were likely to have had an impact on the development of his behavioural problems in his early life. In early adulthood, his aggressiveness and antisociality continued to be high. He regularly got into trouble; fight, stealing, drug taking, and even drug dealing. He was arrested 4 or 5 times – all fighting – between the ages 20 and 23. At age 23, he was involved in a fight in which he threatened someone with a knife and was sent to prison for 10 months. He started taking drugs at age 25 but stopped at age 27 because he felt guilty about it. Andrew committed 4 offences. He started his criminal career at age 14 and committed his last offence at age 23. His level of psychopathy, measured by the PCL:SV, was 15, with a score of 6 points on the affective/interpersonal factors, and 9 on the irresponsible/antisocial factor. This is a very high psychopathy score. Overall, his early experiences of harsh and unaffectionate parental care and negligence might have contributed to the development of his childhood antisociality, which in turn increased the risk of Andrew being engaged in crime. His involvement in criminal behaviour, particularly violence, could also be partly accounted for by some of antisocial and aggressive traits inherited from his father, Simon.
Figure 3: The life course of Simon’s parents (up to Simon married at age 25) – G1-G2 generation (Case 020-CCC families)

Birth of Simon’s mother (G1F)
- 1926
  - Unhappy childhood
  - Alcoholic parents
  - Gave birth to Derek at age 27
  - Emotionally disturbed
- 1953
  - Birth of Simon (G2M)
  - Convicted of theft at age 17
  - Parental neglect
  - Insecure, anxious at age 10
  - Nervous disturbances at age 12
  - Parental conflict
  - Convicted of larceny at age 14
  - Alcohol and gambling problems
- 1969
  - Married at age 26
  - Gave birth to Susan at age 28
  - Gave birth to Daniel at age 30
  - Gave birth to Jasmine at age 33
  - 4 more convictions between ages 38 and 45
  - Died at age 48

Birth of Simon’s father (G1M)
- 1919
  - Unhappy childhood
  - Alcoholic parents
  - Married at age 26
  - Had a son, Simon at age 34
  - Marital conflict
  - Had a daughter, Susan at age 34
  - Tendency to withdraw from family
  - Had a son, Daniel at age 37
  - Had a daughter, Jasmine at age 40
  - 4 more convictions between ages 38 and 45
  - Died at age 48
Figure 4: The life course of Simon’s children (beginning with Simon married at age 25) – G2-G3 generation (Case 020-CCC families)

- **1980**
  - Birth of Simon’s daughter, Sophia (G3F)
  - Married at age 25
  - Had a son, Andrew at age 29
  - Stable work records
  - Started fighting, lying at age 4
  - Happy childhood
  - Adequate parental supervision
  - Parental harmony
  - Stable relationship with his wife
  - Temper tantrums at age 2
  - Left school at age 16
  - Lived with her partner at age 20
  - Gave birth to her child at age 22
  - Split with her partner at age 22
  - Single parenting
  - No criminal offence until the age of 25

- **1983**
  - Birth of Simon’s son, Andrew (G3M)
  - Had a daughter, Sophia at age 26
  - Married at age 25
  - Had a son at age 29
  - Stable work records
  - Started fighting, lying at age 4
  - Happy childhood
  - Adequate parental supervision
  - Parental harmony
  - Stable relationship with his wife
  - Temper tantrums at age 2
  - Left school at age 13
  - Often took many risks, frequently truanted
  - Convinced of damage to property at age 14
  - High aggressiveness
  - Convicted of theft at age 18
  - High aggressiveness, antisociality
  - Gave birth to her child at age 22
  - Split with her partner at age 22
  - Single parenting
  - No criminal offence until the age of 25

- **1979**
  - Simon (G2M)
  - Had a daughter, Sophia at age 26
  - Married at age 25
  - Had a son, Andrew at age 29
  - Stable work records
  - Started fighting, lying at age 4
  - Happy childhood
  - Adequate parental supervision
  - Parental harmony
  - Stable relationship with his wife
  - Temper tantrums at age 2
  - Left school at age 13
  - Often took many risks, frequently truanted
  - Convinced of damage to property at age 14
  - High aggressiveness
  - Convicted of theft at age 18
  - High aggressiveness, antisociality
  - Gave birth to her child at age 22
  - Split with her partner at age 22
  - Single parenting
  - No criminal offence until the age of 25

- **2005**
  - Had a son, Andrew at age 29
  - Stable work records
  - Started fighting, lying at age 4
  - Happy childhood
  - Adequate parental supervision
  - Parental harmony
  - Stable relationship with his wife
  - Temper tantrums at age 2
  - Left school at age 16
  - Lived with her partner at age 20
  - Gave birth to her child at age 22
  - Split with her partner at age 22
  - Single parenting
  - No criminal offence until the age of 25

- **2007**
  - Had a daughter, Sophia at age 26
  - Married at age 25
  - Had a son, Andrew at age 29
  - Stable work records
  - Started fighting, lying at age 4
  - Happy childhood
  - Adequate parental supervision
  - Parental harmony
  - Stable relationship with his wife
  - Temper tantrums at age 2
  - Left school at age 13
  - Often took many risks, frequently truanted
  - Convinced of damage to property at age 14
  - High aggressiveness
  - Convicted of theft at age 18
  - High aggressiveness, antisociality
  - Gave birth to her child at age 22
  - Split with her partner at age 22
  - Single parenting
  - No criminal offence until the age of 25

- **2011**
  - Had a son, Andrew at age 26
  - Married at age 25
  - Had a son, Andrew at age 29
  - Stable work records
  - Started fighting, lying at age 4
  - Happy childhood
  - Adequate parental supervision
  - Parental harmony
  - Stable relationship with his wife
  - Temper tantrums at age 2
  - Left school at age 13
  - Often took many risks, frequently truanted
  - Convinced of damage to property at age 14
  - High aggressiveness
  - Convicted of theft at age 18
  - High aggressiveness, antisociality
  - Gave birth to her child at age 22
  - Split with her partner at age 22
  - Single parenting
  - No criminal offence until the age of 25
4.3. Case 732 Collin (CCN families)

The description of Collin’s family

Collin was born in 1953 and came from a Cypriot family of four children. He was the eldest. In 1958, the father moved to England and settled there. About 9 months later, the father brought the rest of the family to England, except the baby girl, who was not even a year old, because it took too much time for the father to arrange for an escort for her. She was raised by her maternal grandmother in Cyprus and finally came to live with the family in England when she was 5. When interviewed in 1962, the family lived in a working-class three-bedroomed house, which was poorly and sparsely furnished. The house did not have a bath, and there were no luxuries of any sort and even to television or carpets on the floor. In 1964, the family moved to a self-contained basement flat, which was perfectly kept and clean and was in better condition than the previous house. Although it was still an overcrowded home, the home atmosphere was warm and loving, and all the family members showed great affection towards each other. The parents used a moderate level of discipline at home. They had limited English language skills. The first two interviews were undertaken using an interpreter, making it difficult to get all the information the interviewer needed from the parents. In the following interviews, the interviewer managed to interview the parents with the help of the two older children, who were perfectly fluent in English.

Generation 1 (G1)

Collin’s mother (G1F) – Not convicted

Collin’s mother, who had not been convicted, came from a family of four children. She grew up in a supportive and caring family environment where her parents lived in harmony, although they occasionally came into conflict. She left school at age 9 and was illiterate. She was married at age 21. She had not worked at all when she was in Cyprus, except for the fact that she helped on her father’s farm. Since she moved to England, she had started working as a machinist, and she got satisfaction from her job. The psychiatric social worker indicated that she was unable to provide enough attention to her children because of her long work hours. Collin’s mother certainly looked as though she felt languid and had little energy, and her health conditions seemed to be very variable. Collin stated that there were some days when she was in bed, and the next day she was up and about again, apparently free of symptoms. She was emotionally unpredictable and had mood swings, which did not help to build up secure emotional stability for her and her children. When it
4.3. Case 732 Collin (CCN families)
came to the children’s activities outside the home, she verged on overprotective and overindulgent, in the sense that she had little confidence in the children’s abilities and feared that they might, for example, lose their way or meet with an accident, etc., when they were out. Colin’s mother seemed to have led a non-delinquent lifestyle, and she was very friendly and cooperative, although there were the usual difficulties of working through an interpreter.

Collin’s father (G1M) – Convicted

Collin’s father, who had been convicted, had a difficult childhood. He grew up with an unaffectionate parental presence, and his childhood experiences were characterised by poor living conditions and parental disharmony, which contributed to insecure attachment. He left school at 11 and had to go to work to earn money for his family. Collin’s father got married at a very young age when he was only 17. He said that he wanted to leave home because of his parents’ conflicts. He had regrets about his early marriage, but he seemed to enjoy his marriage. At age 26, he moved to England and brought his wife and children a few months later. He said that the main reason for moving to England was his children’s education. He valued education; he spoke bitterly of his father, who withdrew him from school at an early age in order to earn money. It seemed that he had some unfulfilled desires for education, and he wanted his children to fulfil these desires. He was described by the interviewer as a very authoritative man who was strict, compared with other parents in the study, but far from harsh. He saw himself as a bit stricter over rules than his wife, whom he suggested was overindulgent. He took a disciplinary role in the family, and in some ways, he kept a strict watch on things, but in other cases, there was clearly a lack of supervision. This was particularly evident at holiday times when his four children were left to their own devices during the day. He tended to insist upon the children’s immediate obedience, and Collin carried out his wishes, most willingly because the mother thought that Collin was a bit afraid of him.

Collin’s father looked like a young, immature man whose work patterns were unstable. He tended to change his job every few years, as he stated that he liked to make a move every two years because he felt that it was easy to get a job in England compared to his country, Cyprus. He committed 1 official offence at age 28, which was assault. He had a fight with his landlord, which was vicious because two of his opponents (his landlord and the landlord’s wife) were seriously hurt; he used a broom as a weapon. There was no doubt
4.3. Case 732 Collin (CCN families)
that he used an aggressive and violent style of interaction, but, fortunately, this style of interaction did not continue to feature in his later life.

Generation 2 (G2)
Collin’s siblings
Collin had three young siblings, one brother and two sisters. Mark, Collin’s young brother, had an easy manner and was altogether attractive. The mother was worried about Mark, who she thought did not understand things very quickly. It was worth noting the contrast between Collin and Mark during the interviews. While Mark was a passive observer who neither joined in nor listened to the discussions but was totally absorbed in watching television, Collin willingly joined the interviews to help his parents, whose English was limited. Maya, Collin’s young sister, was a silent, unhappy-looking girl. The interviewer was rather perturbed by what seemed to be the family’s attitude towards Maya. She sat quietly and rather demurely, smiling wanly, and the interviewer observed her being ignored by the family throughout the interviews. Her father admitted that the two brothers, Collin and Mark, preferred the other sister Emma. For some time, they refused to accept Maya as their sister. This might be because she was separated from the family after birth and raised by her grandmother for five years. Emma, Collin’s young sister, was a beautiful, thriving child but who was withdrawn and clinging. During the interviews, she insisted on wearing an overcoat and boots, although the living room where the interviews were carried out was warm. She sat clinging to her mother and watching the interviewer intently. She was looked after by a Greek childminder whilst both parents were at work. Mark and Collin seemed devoted to her.

Collin (G2M) – Convicted
Childhood
Collin moved to England at age 5. He did not attend school during the first two years in England – he must have dodged it – but this might be because, in his country, children did not start school until age 7. He started school at age 9 and got on very well with his schoolmates. He was known as a peacemaker who was friendly and very much at ease in social situations, with great aplomb. At age 11, Collin was described by his parents as the clever one in the family, apparently without any problems. However, Collin started to be truant from school and got into trouble. At age 12, Collin engaged in breaking and entering
4.3. Case 732 Collin (CCN families)

a dwelling house and stealing goods with a total value of £5.99, and he was given a 12-month conditional discharge. At age 13, he had problems with school attendance. On one occasion, his father came home unexpectedly from work one day and discovered Collin at home when he was supposed to be at school. For most of his childhood, it seemed that Collin was somewhat poorly supervised because his parents went out to work all day, which might explain why his school attendance record was poor.

Collin was aware that his parents highly valued his education, and he did very well in school but was by no means overconfident about his ability. Instead, he had some inherent fear that he might not be able to pass the requisite exams for qualification. He said that there were times when he felt fed up and wanted to throw the whole thing up and take an unskilled job, but against this, he recognised that there would be very little satisfaction in this in the long run. Collin appeared to be heavily burdened by his parents’ high educational ambitions, and this, in turn, led to a great deal of confusion and uncertainty about his own future. Altogether, the impression Collin gave to the interviewer was of a mature boy with a good deal of social assurance.

Adolescence

Collin left school at age 17, although his parents wanted him to stay on. He got a job as a trainee technician in a large company. He liked the people at work but not the job itself because he did not see much future in the job. From adolescence, Collin seemed greatly restricted by his parents, particularly his father. According to him, his mother was less old-fashioned and let him do more of the things he wanted, but his father always tried to tell him something. His father even tried to arrange a marriage with a Greek woman for him, as many other Greek parents did, which Collin did not understand. He felt very distant from his parents, having a different set of values and beliefs, and this worsened the relationship between him and his parents. He said:

“The Greeks are funny about women really in Cyprus – they think if she’s strong and really good at housework, she’s really good, and she’ll make a man happy. But me, I’ve been brought up in England – I came over when I was 5 – I see things differently, so I just didn’t want to know”.

Between ages 15 and 18, Collin got into 10 fights, three of which were group fights at a youth club, and the rest were at school. He explained that there were a lot of boys of
4.3. Case 732 Collin (CCN families)

other ethnic backgrounds who kept annoying him at school. He had sexual experiences from age 15. Collin self-reported delinquent involvement, such as smoking, drunk driving, selling stolen goods, and driving without insurance. Collin had never taken drugs, but this might be because he had not had the opportunity. Overall, in adolescence, Collin gave the impression of being a non-delinquent type with a conservative Greek-Cypriot background.

Young adulthood

When interviewed at age 21, he was working as a technician. Collin had had the same job for the previous two years and had been promoted to a technician. He hoped to be a technician officer. Collin did not take any drugs or spend much money on drinking. At age 21, he got involved in a fight in which he hit his friend first, but no weapon was used. He admitted having shoplifted 10 times with his brother in the previous two years. He explained that he only shoplifted from small wholesalers whom he thought were selling things so expensive and thus were legalised thieves.

During the interviews, he was very cooperative and truthful, and there was no difficulty getting him to expound at length on any topic. Collin had a steady relationship with his girlfriend and also a trouble-free relationship with his family. The impression he gave to the interviewer was of an intelligent person with a great desire to improve his position jobwise, as indicated by his attendance at evening classes twice a week. He was not an aggressive man but could obviously handle himself in an aggressive situation. Although he admitted to shoplifting, it seemed that this activity was linked to how easy it was for him to get away with it in the situation of buying from wholesalers: he said that he would not steal from an ‘ordinary’ shop because of the risks. Otherwise, Collin was clearly a non-delinquent individual.

Adulthood

At age 32, Collin had managed to buy his own house. He lived there with his wife and a three-month-old son. He was married at age 31, and his wife was English. Collin was very fond of his son and enjoyed spending time with him. Collin described his relationship with his wife as very good, but they had rows, which included shouting and screaming. He admitted that he lost his temper and became horrible to his wife, but at the same time, he mentioned that his wife might do something that annoyed him and developed into a row. Collin and his wife generally agreed on how to parent the child, but Collin tended to leave it
4.3. Case 732 Collin (CCN families)

to his wife. He seemed to handle his child more roughly than his wife would like, not in anger but just in his general treatment of the baby. The interviewer witnessed a pleasant family scene in which Collin obviously doted on his child and cared greatly for his wife. Collin seemed to live a stable and financially secure life, and his job record was stable; he had been working for the same company for 14 years. He did not smoke, drink, or gamble and never got into fights. Overall, the interviewer described him as a genial, warm, and hardworking family man with a friendly wife. It seemed hard to imagine offending in any form except by tax avoidance.

At age 48, Collin was a full-time landlord. The interview was conducted in one of his houses which he rented. Collin and his wife had three children, two sons and one daughter, aged 15, 13, and 10, respectively. His two sons had some behavioural problems, such as lying, stealing, nervous disturbances, and temper tantrums. Collin exerted much control over his children; he did not let them out by themselves, even though his oldest child was aged 15. When the children were naughty, Collin usually smacked them or took away their privileges. Collin described his childhood as happy, although he mentioned that the discipline he received was very strict. Collin and his wife seemed to have a rather unsettled marriage, although they got on well most of the time. The crux of this appeared to be his desire to move to Cyprus, where his parents lived, but his wife was not keen at all. Collin said that there were a number of ‘cultural differences’ between them. Overall, however, he appeared to be a loyal husband and dedicated father. Collin did not smoke, take drugs or gamble. He rarely drank and never had fights in the previous five years. Collin managed a stable relationship with his wife and secured his employment. Talking about his criminal career, his first offence was housebreaking and larceny, which occurred when he was 12. Since then, he had not committed crimes, although he was several times involved in minor incidents, such as speeding. Collin seemed to have lived a conventional and largely non-criminal life.

Collin’s wife (G2F) – Not convicted

Sally, Collin’s wife, who had not been convicted, was interviewed at age 41. At the time of the interview, she was working as a nursery nurse on a part-time basis. Uptil 19, Sally was not particularly problematic, except that she sometimes stayed out at night without her parents’ permission. Sally met Collin at a party, and they became a couple when she was 22.
4.3. Case 732 Collin (CCN families)

It had been 16 years since she was married to him. She had never been separated from him for conflict reasons. Sally claimed that she and her husband completely agreed about how to raise the children, and she thought that Collin was not too strict with the children but did not spoil them too much. It emerged that Sally was a particularly strict mother, as she was convinced that strict discipline develops a good strong character in children. When she used discipline, she usually put the children in isolation, yelled at them, smacked them, or hit them. Sally had a close and stable relationship with Collin, whom she described as perfectly honest, truthful with her, and sincere in his promises. She described her health as excellent. Although she admitted having sometimes been impulsive or having acted without thinking in the previous five years, it clearly seemed that she had lived a conventional life without any signs of antisociality.

Generation 3 (G3)

Child 1 (G3M) – Not convicted

Pearson, who had not been convicted, was interviewed at age 24. He was a somewhat impulsive boy who did things on the spur of the moment without thinking about how it would affect him or others. He sometimes got into trouble with fights and drunk driving, but he never truanted from school and did not have trouble paying attention. Pearson described his childhood as very happy; he mentioned that he got on very well with his parents and that his parents got on very well with each other. Until the age of 16, his parents usually took away his privileges if he misbehaved, which he described as strict, and they sometimes knew where he was going when he went out. After he graduated from university at age 22, he had been working as a software support technician for two years. As a young adult, Pearson was not a smoker, a heavy drinker, or a gambler. He reported having taken drugs once at age 20 but stopped taking them because of fear of prosecution. In the previous five years, he was involved in a fight, in which he slapped and punched someone first but never used a weapon. Pearson had not appeared in court, nor had he been convicted of any offence. The PCL:SV was administered to him; his level of psychopathy was 3, with 3 points weighted on Factor 1 (affective/interpersonal).

Child 2 (G2M) – Not convicted

Serio, who had not been convicted, was interviewed at age 22. As a child, Serio sometimes engaged in risky behaviours like climbing but never truanted from school and
4.3. Case 732 Collin (CCN families)

had no trouble paying attention at school. Serio described his childhood as very happy; he mentioned that he was usually sent to his room as a form of discipline if he misbehaved, and the discipline he received as a child was not very strict. His parents never hit him and always knew his activities and whereabouts. His relationship with his children was very good, and he remembered that his parents got on very well when he was young. He left school at age 18 and went to university. After he graduated from university at age 21, he worked as a teacher in China for six months. He had been working for a childcare agency since last month and was very satisfied with his job. Despite working, he still received money from his parents and had a £10,000 personal loan. In his early adulthood, he was not a smoker, a drug user, or a gambler. He only occasionally drank alcohol. He had a girlfriend of the same age as himself, and they had been going out for 18 months. Sergio was not involved in any fight, nor did he get in trouble. He had not been convicted of any offence. His level of psychopathy, measured by the PCL:SV, was 2, with 2 items scored on the affective/interpersonal factor. His life did not appear to be problematic.

Child 3 (G3F) – Not convicted

Grace, who had not been convicted, was interviewed at age 19. She left school at age 18 and went to university. At the time of the interview, she was studying law at the university. Grace did not show any particular behavioural problems in childhood but sometimes lacked concentration. She described her childhood as very happy; she mentioned that her relationship with her parents was very good and that her parents got on very well. Her parents usually scolded her if she misbehaved, and the discipline she received as a child was not very strict. In her early adulthood, she was not a smoker or a gambler but seemed to enjoy drinking. She had guilty feelings about drinking, and she thought that she should cut down on her drinking. She never took drugs because she thought that the chances of being caught by the police for taking drugs were high. Her level of psychopathy, measured by the PCL:SV, was 0. Grace appeared to be clearly a non-delinquent individual.
Figure 5: The life course of Collin’s parents (up to Collin married at age 31) – G1-G2 generation (Case 732-CCN families)

Birth of Collin’s mother (G1F)
- 1929: Born in the south-eastern Europe
- Truancy at age 13
- Left school at age 11 and started working
- Married at age 21
- Parental harmony and emotional stability
- Low education attainment

Birth of Collin (G2M)
- 1933: Born in the south-eastern Europe
- Married at age 16
- Married at age 16
- Had a son, Collin at age 20
- Had his second son, Mark at age 21
- Left school at age 9 and was illiterate
- Poor home conditions

Birth of Collin’s father (G1M)
- 1933: Born in the south-eastern Europe
- Left school at age 11 and started working
- Married at age 16
- Had a son, Collin at age 20
- Had his third child, Maya at age 24

Gave birth to Collin at age 23
- Gave birth to Maya at age 28
- Gave birth to Emma at age 31
- Gave birth to Mark at age 25

Emotionally unstable, unpredictable
- Poor vigilance
- Convicted of breaking and entering at age 11

Variable in discipline
- Overprotection, overindulgence

Parental ambition for education
- Very authoritative, strict parenting styles
- Great ambition for Collin
- Restlessness and tendency to change his job
- Aggressive, violent style of interaction

Parental harmon and emotional stability
- High academic performance
- Stable job records
- Married at age 31
- Owned house

Moved to England with children
- Truancy at age 13
- High academic performance
- Moved to England at age 5
- Moved to England at age 24
- Moved to England at age 21

Poorly supervised
- Poorly supervised
- Parental ambition for education
- Left school and started working at age 17
- Left school and started working at age 17

Lack of supervision
- Lacking of supervision
- Convicted of assault at age 28

Case 732-CCN families

1968
- Married at age 21
- Married at age 16
- Married at age 31
- Married at age 31

1953
- Married at age 21
- Married at age 21
- Married at age 21
- Married at age 21

1985
- Married at age 21
- Married at age 21
- Married at age 21
- Married at age 21

1929
- Married at age 21
- Married at age 21
- Married at age 21
- Married at age 21

104
Figure 6: The life course of Collin’s children (beginning with Collin married at age 31) – G2-G3 generation (Case 732-CCN families)

Collin (G2M)

- Married at age 31
- Had a son, Pearson at age 32
- A pleasant family scene
- Had a daughter, Grace at age 37
- Very happy childhood
- Nervous habits at age 8
- Good relationships with parents
- Temper tantrums and quarrelsome at age 13
- Authoritative parenting towards children
- Adequate parental monitoring
- Left school at age 18
- Graduated from university at age 21
- No criminal conviction until the age 24

Birth of Collin’s son, Pearson (G3M)

- 1986: Impulsive
- 1987: Temper tantrums
- Very happy childhood
- Moderately supervised
- Fights, drink driving before age 15
- Left school at age 18
- Graduated from university at age 22
- No criminal conviction until the age 24

Birth of Collin’s daughter, Grace (G3F)

- 1985: Financially secure
- 1987: Parental harmony
- Very happy childhood
- Lying, stealing at home at age 14
- Strict discipline
- Took drugs at age 20
- Employed as a technician since age 22
- No criminal conviction until the age 19

Birth of Collin’s son, Serio (G3M)

- 1990: Parental harmony
- Adequate parental monitoring
- Left school at age 18
- Enjoy drinking
- No problematic aspects of his life

- 1987: Authoritative parenting towards children
- Stable relationship with his wife
- A warm and hardworking family man
- Adept parental monitoring
- Left school at age 18
- Employed in a childcare agency since age 22
- No criminal conviction until the age 22
4.4. Case 992 Jacob (CCN families)

The description of Jacob’s family

Jacob was born in 1953 and came from a large Irish family of six children. The family lived in a very dirty, neglected, and untidy home without bedrooms, hot water or other facilities, requisitioned by the local authority, in a dilapidated and rough delinquent area. The parents had some severe rent arrears and frequently quarrelled about money. The family of Jacob was problematic, under the care of the father, who was irresponsible, immature, and uninvolved in family life, and the mother, who was extremely anxious and felt very overwhelmed at times, mainly due to too much responsibility thrust upon her. The children were at least physically neglected and had numerous periods in care when the mother was ill or having a baby, or in prison. The parents took a keen interest in our study, although they often cancelled or forgot visits at the last minute. The interviewer felt that this was a family that would always require support.

Generation 1 (G1)

Jacob’s mother (G1F) – Convicted

Jacob’s mother, who had been convicted, came from a large family of five children. She was the delicate one in the family, having all her mother’s attention. Her mother was always overindulgent and overprotective of her. She did well in school; she was the third in her class. At age 14, her mother was very ill, and she lost her mother a year later. Her father remarried another woman when she was 16, and she was married in the same year. Since then, she had had seven children and at least four miscarriages. It seemed that she unwittingly sought to satisfy her own unmet dependency needs by having repeated pregnancies. Jacob’s mother was an immature and mildly depressed woman with poor physical health. She was little more than a child herself and a very poor housemaker, but it seemed that she had practically no chance to learn any better, without money or her husband’s support. She did most of the reading and writing for the family as her husband was illiterate. Jacob’s mother was an overindulgent mother with a need for an authoritative figure, and her general attitudes toward the children were completely lax and erratic. When the children were out of hand, she just laughed with them or at them, and when she got too overburdened with anxiety, she ignored them and made no effort with discipline. She often neglected the children both physically and emotionally. They were very smelly and dirty and often left on their own at home while she visited her relatives or friends or when she rushed out of the house to raise
4.4. Case 992 Jacob (CCN families)

money or borrow something. They had also been separated from her many times when she was ill or having a baby, or even when she served in prison. When Jacob was 7, she was sent to prison for six months for stealing, and the children were received into care. Her husband was considerably shaken by her prison sentence, and he said: “Most of the trouble is my fault. I only gave her £5 a week”. After her release from prison, she was never convicted of any other offence. It seemed that prison gave her a chance to review her situation and make up her mind on various things. She did regret her past irresponsible behaviour and did not blame society for her plight. Jacob’s mother committed three official offences. Her first offence was fraud, which occurred when she was aged 21. At age 26, she committed two offences, one was other theft, and the other was fraud.

Jacob’s father (G1M) – Convicted

Jacob’s father, who had been convicted, came from a very large Irish family of 12 children and was the eldest. He was brought up harshly in great poverty. He held terrible childhood memories of his father, who always caused severe money problems, frequently came home drunk and was violent to the family. He was particularly protective of his mother, who was devoted to all the children and most likely to be the target of his father’s violence. From age 10, he tried to support the family and lived on his wits, stealing coal, milk, etc. He always truanted from school and left school at age 12. He practically had no schooling. He left home at age 14 and came to England to earn his living, but he seemed to get bored quickly with the same job each day and had difficulty settling into a new job. Jacob’s father was married at age 19 and became a father of seven children. He was a carefree and anti-authoritarian Irishman, and neglect was the predominant characteristic of his attitude to his wife and the children. He gave his wife irregular and insufficient money, on which he expected her to meet all household expenses and look after herself and the children. He tended to withdraw from family life, drank and smoked rather heavily and spent far too much in pubs. He did not exert much discipline over his children or was not violent with them or his wife, but clearly, they feared them. There was always considerable tension in the home whenever he was in. The impression was of an exceedingly irresponsible, immature, emotionally insecure, and dependent young man. When Jacob was 8, he attempted suicide twice due to financial reasons. Jacob’s father committed two official offences; one was theft.
4.4. Case 992 Jacob (CCN families)

from work at age 29, and the other was fraud at age 41. There was no doubt that he would continue to be deviant and live on the fringes of criminal activities.

Generation 2 (G2)

Jacob’s siblings

Jacob had six siblings, four brothers and two sisters. Kirk, Jacob’s older brother, was a withdrawn boy. His school attendance was erratic, and he went before the court for non-attendance several times. At age 10, he broke into his neighbour’s house and lit fires, but there was no recurrence of this. At age 17, he started working in a warehouse, with a long history of non-attendance at school behind him. He did commit no further delinquent acts.

Jacey, Jacob’s older sister, gave the impression of being easily influenced, immature, aggressive, insecure, and very intolerant. She always tried to assert herself by being interested in boys, smoking and being rebellious. She was definitely at risk emotionally and perhaps morally as well and had no sense of responsibility and little sense of appreciation. According to the mother, Jacey became out of control after discovering that her father was having an affair with another woman. She improved considerably after being sent to a remand centre for non-attendance. She started working as a waitress and was happy with this job. She went out a good deal with her friends and behaved “like a normal teenager”.

Mandy, Jacob’s young sister, was a very anxious child who quickly became aware of the tension in the household. She was disobedient at home and somewhat beyond parents’ control, but she seemed more stable than her older sister Jacey. Martin, Jacob’s young brother, seemed a more robust and extroverted boy than Jacob. He was frequently into lying. He often did not go to school and spent his days in the company of other truants whom the mother described as a “rough band”. The mother was very concerned about the possibility of him being involved in delinquent acts.

Taylor was a calm, well-adjusted child with the least disturbance. He demanded a normal amount of affection, whereas the older siblings showed reluctance to seek warmth and affection. Patrick was the youngest in the family, who tended to be overindulged, immature, constantly demanding, and whining. Overall, the older siblings had special educational needs, and their school attendance was constant trouble. It seemed typical of the older siblings in the family that they reacted to difficulties by withdrawing and running away as the father did. It was not unusual for them to run away from school if difficulties arose.
4.4. Case 992 Jacob (CCN families)

Jacob (G2M) – Convicted

Childhood

Jacob was a timid, shy, and quiet boy who did not mix well at school and found it difficult to occupy himself. He was enuretic up to age 8 and showed nervous habits such as nail-biting, thumb-sucking at age 9, and stuttering up to age 11. His mother saw him and his father as alike in temperament. From age 13, Jacob’s level of troublesomeness became high. Jacob and his brother were caught by the police for taking something from a nearly public house, but no action was taken. It was suggested that Jacob’s mother, to some extent, encouraged the older boys to pick up anything saleable that they could find. At age 14, Jacob went before the juvenile court for non-attendance at school, and he was put under supervision and then attended without difficulty. Jacob’s problematic behaviour in childhood might be attributed to his parents’ completely lax and neglectful attitudes towards him and the frequent absence of his mother. Jacob experienced maternal separation at least nine times until the age 8. No doubt, the repeated maternal separation contributed to the lack of parental supervision and monitoring, thereby increasing his involvement in delinquent activities. Overall, Jacob appeared to be an immature boy of low intelligence. He had special educational needs with schoolwork. On the positive side, however, Jacob mixed well with other boys, and amongst a very immature group, he managed to hold his own and kept out of trouble.

Adolescence

Jacob left school at age 16 and started working, but it seemed hard for him to maintain himself in steady employment. He got on badly with his father, who often ‘took it out’ on him. Jacob did not smoke and never took any drugs, although he had had the opportunity. He was a heavy drinker; he went out for drinks every night, and most of the money he earnt was spent on drinks. He was involved in three fights in the previous three years (up to age 18), all of which occurred in either a pub or a bar. The drinking seemed to make him aggressive, causing him to get into fights. Jacob was a shambolic individual whose powers of memory were virtually non-existent. He was incapable of rationalising his life, and much of his deviant behaviour was entirely random. The interview at age 18 was conducted under extremely difficult conditions. Jacob was uncooperative and imposed a time limit on the interview. He also realised that positive responses meant that the interviewer
4.4. Case 992 Jacob (CCN families)

would follow up questions, so he tended to say ‘no’ when he really should have said ‘yes’. His accounts seemed unreliable; he denied his court appearance for truancy at age 14, despite much probing, yet he admitted all other offences. Jacob committed 7 motoring offences as a juvenile, but he had extreme difficulty in separating these offences because of the large number of crimes he had committed. He self-reported high levels of involvement in delinquent activities between the ages of 16 and 18, such as joyriding, receiving, and breaking and entering. The main cause of his maladjustment seemed to be his family, which provided a culture that was supportive of his delinquent activities. His parents did not care about his criminal offences, and their reaction was just to think that he was stupid to carry on doing it. None of the family had any regard for the law or, indeed, any sort of authority.

Young adulthood

At age 21, Jaco did not smoke or take drugs, but he frequently got into fights, drank heavily, and spent most evenings going to pubs and discos. His sexual life was promiscuous, having sexual involvements with five different women besides his girlfriend. When interviewed at age 21, Jacob was much more cooperative than when interviewed at age 18. The impression he gave to the interviewer was that he was still delinquent and a bit of a shambles, but he had reformed a bit since the last time the interviewer saw him. Jacob was re-interviewed at age 25. He was married at age 22 and had a 2-year-old daughter. He was living with them in a rented council two-bedroom flat. Jacob was officially unemployed and received unemployment benefits, but he was actually working as a mini-cab driver. He still drank heavily and had promiscuous sexual relationships with ‘hundreds’ of different girls. He often deceived his wife by pretending he was working when he was actually out with his mates drinking and picking up girls. His relationship with his wife was uneasy, and some indication of this emerged from the fact that Jacob broke the door down every time when his wife locked him out of the house. Jacob recounted his court appearance for handling stolen property at age 25, which he said was all an accident. One day, his best friend, John, came around to see him after committing his second robbery. John was wearing a solid gold medallion around his neck, valued at about £1,000, which was proceeds from the robbery, and John left the medallion at Jacob’s house before they left to go out drinking. The following day John was arrested and let the police know where all the proceeds from the robbery were, and the police called at Jacob’s house and found the medallion. The police arrested and
4.4. Case 992 Jacob (CCN families)
charged Jacob with handling. Overall, Jacob was an irresponsible young man, seeking personal pleasure without regard to responsibilities and having a hedonistic lifestyle.

Adulthood

At age 32, Jacob was living with his girlfriend and two children from her previous relationship. He was separated from his wife at age 27 and divorced at age 29, and since then, he had had no contact with his children. Jacob got on well with his girlfriend, but he doubted if they would still be together in five years’ time because he thought that she was too young (age 21). Jacob was unemployed and lived on supplementary benefits. His working pattern was erratic; he estimated that the ratio of employment to unemployment was 3:2, i.e., over the past five years, he would have worked three years and not worked for two years. Jacob regularly got into trouble, mainly fights, consumed drugs, drank heavily and drove loads of times after drinking in the previous five years. His sexual life remained promiscuous, having sexual relationships with 18 different women in the past year. The impression of Jacob was of a retiring and quiet person, and what stood out during the interview was Jacob’s illiteracy and low intelligence.

At age 48, Jacob was re-interviewed in a pub. He had moved out of London and started living with his second wife and her daughter four years ago. Jacob still got into fights, drank heavily, took drugs, drove after driving, and had unsafe sexual relationships with prostitutes. He also admitted having attempted suicide twice over women. Jacob described his childhood as very unhappy. He remembered that the disciplinary climate at home was very strict, with his parents beating him for no apparent reason. Although he had two biological children, he could not give specific information about them because he had no contact with them. The impression that Jacob gave the interviewer was of a very footloose individual, mainly with a rapid succession from one relationship to another, from one address to another, and from one job to another. Jacob was an immature and irresponsible man whose ambition in life was drinking and having sex. Evidently, he had a very deviant lifestyle with no other horizons. No doubt Jacob would continue to be deviant and live on the fringes of criminal activities. Jacob’s criminal career was characterized by 10 convictions, including 5 drink-driving offences. He started his criminal career at age 17 and committed his last offence at age 55.
4.4. Case 992 Jacob (CCN families)

Jacob’s wife (G2F) – Convicted

Isla, Jacob’s wife, who had been convicted, was interviewed at age 52. She married Jacob at age 19 and had two daughters with him, but she was divorced at age 26. When she was 30, she had been remarried to Jacob’s friend who was also our study man. Therefore, her interview at age 52 was found in his files, not in Jacob’s. At the time of the interview, Isla was the owner of two salons, and she was living with her husband in a detached two-bedroom house owned by her. During her teenage years, she often truanted from school but did not do things that could get her into trouble. She left school at age 16, and there was no other information about her past history. The two daughters had behavioural problems, such as fights, temper tantrums and lying. Isla always knew where the children were going when they were out, and when she needed to use discipline, she usually talked to them, told them off, and yelled at them. Her relationship with her second husband was not going very well; they had constant violent rows, which included slapping, grabbing, and shoving. She complained a great deal about him, who drank excessively, neglected his obligations to the family, and had problems finding and keeping jobs. Her second husband definitely led a very antisocial and criminal lifestyle, and his criminal career included 16 official offences. Like her second husband, Isla often drank heavily and took drugs, and her drug and alcohol problems were so severe that her close relatives complained about her drinking and drug use. Isla admitted having stolen anything, for example, shoplifting or forging a cheque. Isla committed three official offences. Her first offence occurred at age 18, and her last offence at age 31. Jacob’s wife, Isla, came across as deviant.

Generation 3 (G3)
Child 1 (G3F) – Not convicted

Julia, who had not been convicted, was interviewed at age 28. At the time of the interview, she was living with her mother and stepfather. Julia worked as a nail technician in her mother’s nail shop since the age of 16. Her natural parents split up when Julia was only 5 years old, and she stayed with her mother. Her mother was remarried when Julia was about 10, and Julia had been raised by her mother and stepfather since. Julia described her childhood as very happy, being raised by her natural mother and stepfather for most of her childhood and having good relationships with both of her parents. She described the discipline she received as not very strict, although her parents usually smacked her or hit her
4.4. Case 992 Jacob (CCN families)

very occasionally if she misbehaved. Her parents sometimes knew where she was when she was out. When she was young (under age 12), she was a somewhat impulsive girl who did things without thinking and very occasionally engaged in risky behaviour. At school, she frequently truanted but never had trouble paying attention. She left school at age 16. In adolescence, Julia regularly got into trouble, taking drugs, driving after drinking, and staying out at night despite parental prohibition. She admitted having taken cannabis between ages 14 and 17. In young adulthood, she continued to drink, smoke heavily, and drive after drinking. Unlike her parents, however, she had never been involved in fights, nor had she appeared in court for a criminal offence. This was somewhat surprising because Julia might have inherited some of antisocial traits while growing up in a criminogenic home environment. Julia’s level of psychopathy, measured by the PCL:SV, was 6, with a score of 3 points on the affective/interpersonal factor, and 3 on the irresponsible/antisocial lifestyle.

Child 2 (G3F) – Not convicted

Jane, who had not been convicted, was interviewed at age 31. She was living in a rented flat with her partner and two children: one from her previous relationship and the other from her present relationship. Her first child was born when she was 22, and the other child was born two years before the interview. Jane was a housewife while her partner was unemployed. They lived on income support and child benefit. Jane and her partner always agreed on how to control the children and always knew where they were when they went out. They usually grounded them as a form of discipline. Jane got on well with her partner, although they had rows monthly during which they shouted at each other. Despite all this, Jane thought that their relationship could last because she loved him. Her parents split up when she was only 2, and she stayed with her mother. Once her mother was remarried when she was 7, she was raised by her mother and stepfather. Jane described her childhood as very happy, mentioning the strict discipline in the house, and usually being hit or beaten when she was naughty. Her parents always knew where she was when she went out. During her childhood (under age 12), Jane was into lying, had temper tantrums, and sometimes engaged in risky behaviours. At school, she frequently truanted and sometimes had trouble paying attention. She left school at age 14 and had her first sexual intercourse at age 16. As a young adult, she gave the impression of a woman who liked doing crazy things just for fun and had angry outbursts. These behaviours became worse when she was drunk. When asked where
4.4. Case 992 Jacob (CCN families)

she wanted to be in ten years, Jane responded that she wanted to live abroad in ten years, which appeared unrealistic in light of her background of educational and employment records. It was again surprising that Jane had never been involved in fights or appeared in court for a criminal offence, although she was expected to have a high risk of offending via both genetic and environmental influences not only from her natural father, Jacob but also from her mother and stepfather. Jane’s level of psychopathy, measured by the PCL:SV, was 3, with 3 points weighted on Factor 2 (irresponsible/antisocial lifestyle).
Birth of Jacob’s mother (G1F)

1933

- Large family
- Parental overindulgence, overprotection
- Married at age 16
- Birth of Kevin at age 17
- Her mother died at age 15

Birth of Jacob’s father (G1M)

1929

- Extreme poor, large family
- Left home and came to England at age 14
- Had a daughter, Kevin at age 21
- Violent, alcoholic father

Birth of Jacob (G2M)

1953

- Married at age 19
- Had his first son, Kevin at age 21
- Parental conflicts

- Convicted of fraud at age 21
- Large family
- Poor housing
- Frequently truant
- Immature, mildly depressed

- Parental lax attitude
- Convicted of two offences: other theft and fraud at age 26
- Serious financial problems
- Served in prison for 4 months

- Serious rent arrears, heavy debts
- High troublesomeness
- Left school at age 15

- Convicted of joyriding at age 17
- Convicted of theft at age 18
- High levels of involvement in delinquent activities
- Convicted of burglary at age 18

1968

- Court appearance for truancy at age 14
- Attempted suicide at age 31
- Child neglect
- Irresponsible, immature, promiscuous sexual life

1976

- Emotional, insecure, easily depressed
- Withdrew from family life
- Heavy drinking, fighting, promiscuous sexual life

1970

- Attempted suicide at age 33
- Served in prison for 4 months
- Had a son, Patrick at age 24
- Had a daughter, Mandy at age 21

- Serous financial problems
- Overindulgence
- Lax, erratic discipline

- Convicted of fraud at age 41

Figure 7: The life course of Jacob’s parents (up to Jacob married at age 22) – G1-G2 generation (Case 992-CCN families)
Figure 8: The life course of Jacob’s children (beginning with Jacob married at age 22) – G2-G3 generation (Case 992-CCN families)

**Birth of Jacob’s daughter, Julia (G3F)**
- Married at age 22
- Convicted of theft at age 23
- Had a daughter at age 26
- Separated from his wife at age 27
- Had a daughter at age 28 (From her present relationship)

**Jacob (G2M)**
- Convicted of handling stolen goods at age 25
- Active life
- Erratic working patterns
- Separated from his mother at age 2
- Sorry

**Birth of Jacob’s daughter, Jane (G3F)**
- Had a son at age 22 (From her previous relationship)
- Had a son at age 30
- No criminal offence until age 31

**Life Course Events**
- Lying, temper tantrums at age 11
- Left school at age 14
- Separated from her natural father Jacob since age 2
- Left school at age 16
- Worked as a nail technician since age 16
- No criminal offence until the age 28
- Enjoyed drinking, smoking
- Unstable interpersonal life, sexual promiscuity
- Convicted of assisting an offender at age 55
- Very happy childhood
- Being hit or beaten as a punishment
- Left school at age 16
- Started living with her partner at age 30
- No criminal offence until age 31
- Being hit or beaten as a punishment
- Left school at age 14
- Had a son at age 28 (From her present relationship)
- Had a son at age 30
- No criminal offence until age 31

**Timeline**
- 1976: Birth of Jacob’s daughter, Julia (G3F)
- 1980: Birth of Jacob’s daughter, Jane (G3F)
- 2008: Started living with his second wife at age 44
- 2011: Started living with his girlfriend at age 44
- 2011: Started living with his second wife at age 44
- 2011: Started living with his girlfriend at age 44
4.5. Case 081 Roger (CNC families)
The description of Roger’s family

Roger was born in 1953 and came from a family of three children. He was the youngest. Originally, there were four children, but one child, born in 1941, died of peritonitis. The family lived in a large dingy flat, which was adequately furnished though by no means smartly. The home conditions were comfortable, but the mother complained about the flat having too many restrictions and being in extremely bad conditions for the children to bring in their friends. The marital climate was thoroughly positive; his mother had much love and admiration for her husband, and his father was in every way considerate towards his wife. Financially they shared everything and seemed secure. Both of his parents were very interested in the education of the children, but they often disagreed on how to control the children; while the father never laid hands on them, the mother sometimes wished that he would. His parents’ parenting style was seemingly marked by overprotection and fear over the children’s issues, which might discourage the children from seeking greater independence. Overall, Roger’s parents were very loving and concerned about the children, and altogether the home seemed to be in peace and harmony without serious problems. The family was friendly, and all the children were good-looking.

Generation 1 (G1)
Roger’s mother (G1F) – Not convicted

Roger’s mother, who had not been convicted, came from a very large family of 16 children. Her family lived in a rough neighbourhood at the docks. She described her childhood as unhappy; she mentioned that her family was very short of money and sometimes short of freedom and love. Her home was very strict; her father was always anxious to keep the family out of trouble. None of her siblings ever got into trouble and did quite well. She left school at age 14 and went straight to work in a factory until she got married at age 23. When Roger was 2 years old, she went back to work as a cleaner at a school, and she was very satisfied with this. She got on very well with her husband, although there were quarrels that were sometimes audible to the children. Roger’s mother had lost her child at age 31. She said that this was the most upsetting thing that happened in her life, and since then, she had become more careful and more vigilant with her children. She was anxious, restrictive, and overprotective to a degree, which made it very difficult for the children to be independent. She was always afraid that something would happen to them and
4.5. Case 081 Roger (CNC families)

became too involved in their lives; for example, she did not let them cross the road on their own, and she always did things for them. She was very obsessional about the children and defended them like a tigress. This was shown by the fact that they were likely to come to her if the children were in any sort of trouble. When the children were naughty, she often threatened them but punished them very rarely. She tended to nag them a good deal; however, the children did not take much notice of her. The impression Roger’s mother gave was of being a physically feeble lady who suffered from depression and got extremely fed up with everything. The outstanding thing in the interviews was her great ambition for Roger, although she was unwilling to do much to encourage him. She firmly believed that Roger was intelligent at home and could do very well at school, although his school reports were very bad. There seemed to be a great divergence between what she thought of Roger’s ability and what the school thought. During the interviews, she was talkative, very cooperative, and discussed her problems freely. She had not committed any offence, and it seemed unlikely that she would commit any offence in the future.

Roger’s father (G1M) – Convicted

Roger’s father, who had been convicted, was one of four siblings. He described his childhood as happy, growing up in a happy family atmosphere. He talked of his parents with positive feelings; he mentioned that his parents were wonderful, and they got on very well with each other. All his siblings had no difficulties or problems, and none left home until they got married, as they all seemed very happy at home. He did well at school. He could have gone to a technical college, but he left school at age 14 and started a clerical job. He left this job after a year because of the low salary. He then worked the same job as his father, as a manual porter in the market. He had been working this job all his life and never had a day out of work. Roger’s father was married at age 23. He got on very well with his wife, and his wife had great respect for his intelligence, and she thought that Roger took after him. However, they had frequent rows over Roger because she was critical of the way he handled Roger. She felt that Roger’s father was overanxious and overprotective, continually warning him and asking where and who he had been with. Roger’s father treated Roger as a young child, as he fusses over him and stopped him from doing things in case he got hurt or got into trouble. When Roger was naughty, the father always threatened him but rarely punished him. He was very strict at times, but he always spoiled Roger by giving him anything and
4.5. Case 081 Roger (CNC families)

doing anything for him. Despite all this, the father got on very well and did much together. Roger’s father was a thoughtful and intelligent man with a good vocabulary. During the interviews, he spoke warmly about his own family, and there was no single negative word he had to say about them. He committed one official offence at age 46, which was theft from work, but his life was not particularly problematic.

Generation 2 (G2)

Roger’s siblings

Roger had two older siblings. Camila, Roger’s older sister, was a shy and calm person. She was 8 years older than Roger and had a close relationship with him. She was married at age 21 and lived elsewhere, but was very much part of the family, visiting her mother every day with her baby and going away on holiday together. She was very fond of Roger; she paid great attention to him and was always ready to listen to him. It seemed that she played an important role in Roger’s early life. Travis, Roger’s older brother, was 5 years older than Roger. He left school at age 15 and started working as a gas fitter. The mother was never ambitious about him as she did not think him to be much of an intellectual. He did well in his job and bought himself a car. At age 22, he was remanded in custody after being accused of stealing a handbag. Roger’s siblings seemed to have no serious problems at all, and according to the father, they were all good and very helpful.

Roger (G2M) – Not convicted

Childhood

Roger, who had not been convicted, was neither shy nor timid and showed a surprising amount of knowledge and memory at home. His mother was highly ambitious for him, as she believed that he was the brightest in the family. Roger did quite well at school, but not as much as his mother expected. At school, he was never bossy nor did he get bullied. Roger was extremely active and never sat still; his father found him terribly restless. Until age 10, his parents, especially his mother, did not let him do anything by himself; he never washed himself and they had to wash him. When he was 11, his mother had severe depression and anxiety, which was clearly seen as negative and unpleasant influence in the family. His mother admitted being terribly impatient with Roger and often screaming at him for no apparent reason. He became quite unaffectionate and undemonstrative towards her. Roger continued to be restless, so the psychiatric social worker suggested joining him in some
4.5. Case 081 Roger (CNC families)

active clubs where he could use up some of his restless energy. At age 14, Roger was critical of the school and lost all interest in working for exams. He decided to leave school soon and train to be a butcher, although his parents were keen on his education. Roger did not lie to his parents, but he sometimes avoided telling them things which he thought might upset them. He usually told his sister Camila instead and, if she advised him that it was something that his parents had to know about, then he told them or occasionally got her to tell them for him. It seemed that Roger trusted and relied on his sister Camila and that his relationship with her was very important to him. Roger was a bright boy of rather above-average intelligence with no particular difficulties. His parents were pleased with him on the whole.

Adolescence

At age 15, Roger left school and started working as a trainee butcher. He was enthusiastic about his job and expected to be a qualified butcher and wanted to eventually get his own business. When interviewed at age 18, he worked as a butcher and liked his job very much. Roger started smoking regularly at age 14 and had sexual experiences from age 15. He recounted that at age 15, he used to go around in a group of 11 or 12 mates – walking the streets, pulling girls, and having fights – but they never did anything serious and never got into trouble. At age 17, he was involved in two fights, each of which was not particularly vicious; no weapon was used. Roger was engaged to marry at age 17. He was saving money to get married to his fiancée in about three years. Roger spent most of his spare time at home playing cards or watching T.V. He stated that he did not enjoy drinking because he got drunk so easily. He was never involved in any fights and never took drugs because of his fear of drug addiction. Overall, Roger was a dedicated butcher who seemed very well-adjusted, steady, and responsible. Although he was susceptible to antisocial peer pressure, he had been distinctly non-delinquent for about two years – since he met the girl he intended to marry.

Young adulthood

When interviewed at age 21, Roger had been working as a butcher for more than two years. At the time of the interview, he still lived with his parents, and it seemed that he had broken up with his fiancée. Roger did not smoke, take drugs, or drink much, but he got into several fights in the previous two years, one of which was particularly vicious because he knocked someone out, but no weapon was carried or used. He also often went out with a group of four or more mates and became sexually promiscuous, having sexual intercourse
4.5. Case 081 Roger (CNC families)

with four different girls in the previous two years. Roger recounted that he had taken home about 8lbs of meat each week from the butcher where he worked. Although he claimed that it was a legal fringe benefit, he practically stole from work, just like his father, who was convicted of theft from work at age 46. It appeared that Roger and his father behaved in a similar fashion with respect to criminal behaviour. During the interview, Roger gave the impression of a man with a very strong race prejudice. He forcefully expressed: “I hate blacks, I hate dagos, Irishmen; I only like English people”. The interviewer described him as a man who was truthful, cooperative, willing to be seen again, straightforward, and reasonably well-adjusted. At the same time, however, the interviewer felt that Roger would be capable of violence. He seemed to find it difficult to stay out of trouble, especially in fights.

Adulthood

When Roger was interviewed at age 31, the interviewer described him as a successful and hardworking man with conservative attitude. The interview took place at one of his butcher shops; he owned two butcher shops and spent his time busily between both. He was happy with his work and keen on investing as much as possible into his business. Roger was living with his wife and two children in his six-bedroom detached house. He married her at age 24, and he mentioned that his relationship with his wife was going very well. Roger enjoyed being with the children and always tried to spend time with them as much as possible. Roger regularly smoked and had a couple of pints every single night on his way home from work. He admitted feeling guilty about drinking and thinking that he should cut down on drinking. In the previous five years, he drove after drinking over ten times and had two fights, both of which happened at work, because someone stole from his business. Other than that, Roger did not get involved in any trouble. Roger was an optimistic and productive man who was very hopeful about his own future and kept himself busy and occupied.

Roger was re-interviewed at age 48. He got on very well with his wife; he mentioned that he never rowed with her. They had two daughters, both of whom had some behavioural problems, such as lying, stealing, and fighting. Roger and his wife always agreed on how to control the children; they never hit or beat the children but usually sent them to their room or early to bed if they were naughty. Roger described his childhood as very happy,
4.5. Case 081 Roger (CNC families)

mentioning the lenient discipline in the house, and usually being sent to his bed or early to bed if he misbehaved. What seemed to emerge from his account of his childhood was a sort of intergenerational continuity from his parents’ style of disciplining to his style of disciplining his children. Roger smoked and drank a lot. His drinking habits were a bit worse than when he was interviewed at age 32; he had sought professional help to reduce his drinking a year before the interview. It seemed that he drank heavily as a counterbalance to all his work. He also admitted driving after drinking over 200 times in the previous five years, but he was never caught. He had 10 fights in the previous five years, all of which he threw the first punch. It seemed that Roger was capable of an outburst of violent temper. Nevertheless, he led a stable life; he had been working as a butcher since he was 23 and living with his wife in the same place for 24 years. Roger came across from the beginning as quite a serious and stern man who rarely smiled throughout the whole interview. The impression Roger gave was of being entirely fixed in his ideas and being traditional. Roger died of illness at age 54.

Roger’s wife (G2F) – Not convicted

Jessica, Roger’s wife, who had not been convicted, was interviewed when she was 47. At the time of the interview, she was working as a secretary, mostly typing and making appointments. She left school at age 16, and until the age of 18, she was not particularly involved in antisocial behaviour except that she sometimes stayed out at night. Jessica met Roger in a pub at age 21 and had been living with him for 24 years. Jessica mentioned that the relationship with Roger was going well and very stable. When asked whether they agreed about how to control their children, Jessica responded that they did not always agree about it and that she sometimes worried that Roger was too strict with the children, which was contrary to what Roger responded. Jessica described Roger in generally positive terms, except for complaining about his drinking. According to her, Roger drank too much alcohol, and his drinking often created problems between them because he spent more money than she wanted him to on alcohol. Jessica also admitted that she sometimes drank too much alcohol but felt that she was able to stop drinking when she wanted to. Jessica had no criminal offences, and it was clearly seen that her life showed no signs of antisociality.
4.5. Case 081 Roger (CNC families)

Generation 3 (G3)

Child 1 (G3F) – Not convicted

Amelia, who had not been convicted, was interviewed at age 23. At the time of the interview, she was living with her parents and younger sister. Since Amelia left school at age 16, she had been working as a sales consultant in the travel industry. Amelia described her childhood as happy, although she mentioned the strict discipline in the house. Her parents usually shouted at her and sometimes hit her if she misbehaved. They always knew where she was going when she went out. Her behaviour in childhood was not problematic at all. At school, she never truanted nor had trouble paying attention. She mentioned that at age 12, she wrote on things at school because of peer pressure, which seemed to be the only bad thing she had done when she was young. As a young adult, Amelia did not smoke or drink much. She never got into fights and never took drugs. Just like her parents, she never appeared in court for a criminal offence. During the interview, Amelia was completely cooperative and truthful. The PCL: SV was administered to her; her level of psychopathy was 0, indicating the absence of traits and behaviours associated with psychopathy. She definitely seemed to have no signs of antisociality and to be living a conventional and non-criminal life, characterized by a stable job record and non-involvement in antisocial activities.

Child 2 (G3F) – Convicted

Elena, who had been convicted, was interviewed at age 25. She was living in a three-bedroom house with her partner and her partner’s parents, and she started living with them at age 22. Since leaving school at age 16, Elena had had seven different jobs, indicating that she had an irregular work situation. At age 22, she had to quit her job and became unemployed for five months due to her father Roger’s illness and his death. Since last month, she had been working full-time in financial services, but she was not very happy with this job. Unlike her sister Amelia, Elena was a problematic girl from an early age. Before age 15, she was into frequent lying, stealing elsewhere, fighting, showing risky behaviour, and bullying or threatening other children. At school, Elena never truanted but sometimes had trouble paying attention and was expelled from school once. She started taking cannabis at age 16, and cocaine at age 17, and she still took them until now (age 25). As a young adult, Elena appeared to be a high sensation seeker, who drank much, often drove after drinking,
4.5. Case 081 Roger (CNC families)

smoked heavily, and regularly took drugs. She felt guilty about her drinking and drug use, but it was very unlikely that she would stop drinking or taking drugs in the future. Although she was somewhat impulsive and short-tempered, she was never involved in any fights. Elena described her childhood as very happy, although she mentioned that she was brought up by her parents, who usually smacked her and very occasionally hit her, and the discipline she received was very strict. Her parents failed to provide adequate care and supervision; they only sometimes knew where she was going when she went out. This might have increased her risk of participating in antisocial behaviour in her childhood and later life. Elena committed one official offence at age 22, which was drunk driving. At age 28, however, she was cautioned for drunk and disorderly behaviour. Her drinking habit seemed to have encouraged her involvement in antisocial activities. Elena’s level of psychopathy, measured by the PCL:SV, was 4, with a score of 4 points on the irresponsible/antisocial lifestyle. Her life was problematic in many aspects, and interestingly, this contrasted with her sister’s life.
Figure 9: The life course of Roger’s parents (up to Roger married at age 24) – G1-G2 generation (Case 081-CNC families)

Birth of Roger’s mother (G1F)

1916

Large family

Left school at age 14

Very strict discipline

Unhappy childhood

Married at age 23

Lost her first child at age 31

Depression, anxiety

Gave birth to Isabella at age 25

Gave birth to Roger at age 36

Overanxious, restrictive, overprotective

Tiger parenting

Great ambition for Roger

Nagging, threatening

Gave birth to Camila at age 28

Comfortable home condition

Extremely active, restless

Did well at school

Lenient discipline

Left school at age 15

Financially secure

Uneasy parental support

Did well at age 14

Suspicious to antisocial peer pressure

Engaged to marry but split up

Involved in fights, promiscuous sexual relationship

Married at age 24

Warm, loving parents

Happy childhood

Married at age 23

Lost his first child at age 31

Tended to spoil his children

Overanxious, overprotective, overcritical of his children

Threatening

Engaged to marry but split up

A lovable, considerate family man

Had been working as a porter all his life

1968

Birth of Roger (G2M)

1916

Did well at school

Left school at age 14

Did well at school

Left school at age 14

Had a son, Roger at age 36

Tended to spoil his children

Overanxious, overprotective, overcritical of his children

Threatening

Engaged to marry but split up

A lovable, considerate family man

Had been working as a porter all his life

1968

Married at age 24

Capable of violence

Engaged to marry but split up

A lovable, considerate family man

Had been working as a porter all his life

1977

Engaged to marry but split up

A lovable, considerate family man

Had been working as a porter all his life

125
Figure 10: The life course of Roger’s children (beginning with Roger married at age 24) – G2-G3 generation (Cas 081-CNC families)

**Roger (G2M)**
- Married at age 24
- Had a daughter, Amelia at age 29

**Birth of Roger’s daughter, Amelia (G3F)**
- 1985
  - Fighting, bullying, engaging in risky behaviours at age 10
  - Lying, stealing at home at age 4

**Roger**
- 1983
  - Birth of Roger’s daughter, Amelia (G3F)
  - Married at age 24
  - Had a daughter, Elena at age 31

**Birth of Roger’s daughter, Elena (G3F)**
- 1983
  - Happy childhood

**Roger (G2M)**
- 1983
  - Birth of Roger’s daughter, Amelia (G3F)

**1977**
- Had a daughter, Elena at age 31
- Owned two butcher shops
- Enjoyed being with his children

**1985**
- Fighting, bullying, engaging in risky behaviours at age 10
- Lying, stealing at home at age 4
- Very strict discipline

**2006**
- Happy childhood
- Strict discipline
- Adequate parental supervision
- Left school and started working at age 16
- No drinking alcohol, smoking and taking drugs
- No criminal offence until the age 23
- Capable of violence
- Died of illness at age 54

**2006**
- Enjoyed being with his children
- Got on very well with his wife
- No involvement in antisocial activities

**2007**
- Regularly smoked, drank heavily
- Led a secure, stable life
- No drinking alcohol, smoking and taking drugs
- Stable job records
- High involvement in fights, driving after drinking
- Cautioned for drunk and disorderly behaviour at age 28

**2013**
- High sensation-seeking
- Sentenced to prison for drunk driving at age 22
- Started living with her partner and her partner’s parents at age 22
- Light job changes
- Expelled from school
- Left school at age 16
4.6. Case 813 Dean (CNC families)
The description of Dean’s family

Dean was born in 1953 and was an only child. He grew up in a quite wealthy family. His family lived in a fully equipped two-bedroom flat, which was excessively tidy, well-furnished, and well-kept, and its material living standards were excellent. The father bought himself a new classic car with every indication of being extremely comfortable. The family spent every weekend going somewhere in the car. His parents worked full-time, and his maternal grandmother often looked after him while they were at work. His parents’ parenting style involved threats; for example, when Dean was naughty, they threatened to send him to a boarding school, which caused him to experience fear or anxiety. Both parents cared about Dean very much and showed great interest in his education. The description of his family given by the psychiatric social worker was of a family being extremely comfortable and financially secure. Dean’s family life appeared stable, well-organised, and completely normal in every way.

Generation 1 (G1)
Dean’s mother (G1F) – Not convicted

Dean’s mother, who had not been convicted, came from a working-class family of four children. She was the youngest. She described her mother as warm and her father as strict and dominating in the family. Her parents got on very well with each other. She left school at age 14, and since then, she had been working as a typist for 18 years. She left home and got married at age 22. Her working career was interrupted for 4 years during her pregnancy and childbirth. She was on very close terms with her mother, who looked after Dean while she was working. She always sought her mother’s help in childrearing. She got on badly with her husband; her husband wanted another baby, but she did not. Her refusal led to great tension between the two. Dean’s mother was affectionate towards Dean, but at the same time, overanxious, overprotective, and mildly neurotic. For example, she felt uneasy about letting him across the roads on his own due to her fear of his safety. When Dean was naughty, she often used the withdrawal of love and threatened this as a discipline. For example, she once told him to look for another mother or pretended that she was dead – Dean was terribly upset and never did the same thing again. Her forms of discipline might have caused Dean to keep behaving in challenging ways, negatively affecting his development. She was very ambitious for Dean and immensely proud of him. She stated that it would be
The document contains the following text:

4.6. Case 813 Dean (CNC families)

up to him to go to university or choose his job, but it seemed that she would be obviously very disappointed if he did not go to university or if he did not choose one of the professions. During the interviews, Dean’s mother was very cooperative and willing to help with our study, but she was difficult to interview because she was extremely talkative. She had not committed any offence and appeared to live a conventional and non-criminal life.

Dean’s father (G2M) – Convicted

Dean’s father, who had been convicted, came from a poor family of seven children, with whom he was on good terms. He described his family as a respectable, self-respecting working family. His parents were warm but, at the same time, very strict towards him. He often witnessed conflicts between his parents, and this was likely to develop his emotional instability in his early childhood. He left home at age 17 and served in the navy until age 21. Since then, he had been working as a carpenter for many years. He was married at age 25 and had a son Derek at age 27. He got on very well with Dean, and they often went fishing or watching football matches together. He was very ambitious for Dean and had very high expectations for his education. He explained that he did not want Dean to be a carpenter or anything similar to himself. When Dean was naughty, he often scolded or shouted at him, and he described the discipline he used as strict, and he said: “my parents were strict, and I am strict with my son as my parents were with me”. Dean’s father gave the impression of a very good husband, as he was free with his money and always ready to decorate the house for his wife, although he hated housework. He did not enjoy going out for drinks or any other sort of entertainment. Although he was at times irritable and had a bit of temper, he did not get into any trouble. Clearly, he was very interested in his family and able to provide his wife and Dean with stability in his affection. Dean’s father committed one official offence at age 33, which was theft from work. His deviant tendency seemed low, making it unlikely that he would continue to live on the fringes of criminal activities.

Generation 2 (G2)

Dean’s siblings

Dean was the only child (no siblings).
4.6. Case 813 Dean (CNC families)

Dean (G2M) – Not convicted

Childhood

Dean was a very peaceful and placid boy who disliked quarrelling and preferred not to fight. Dean started school at age 5. He liked school very much, and he was not bullied and nor was he picked on by teachers. At age 10, Dean was said to be exceedingly good and quite wonderful at school. When he was 11 years old, Dean’s school reports suggested that he set a good example to the rest of the children in his class. His parents recently visited his school for an open day and met several of his teachers, all of whom spoke very highly of him. Dean was obedient and did most things without having to be reminded of his parents again. Dean sometimes defied his mother but never with his father. He was also capable of doing things for himself and reasonably able to rely on himself. At age 14, Dean continued to do very well at school and came near the top of his class. He was very happy at school and enjoyed several sports, including football and swimming. Dean appeared to be a tidy, unaggressive, and quiet little boy with mild fears, not very sociable but without significant problems. It seemed that Dean was no worry to his parents at all. His parents had high expectations of him, and they seemed to give him all the encouragement and support they could to make the most of his education. Dean, in all his childhood, grew up in a family where his parents provided love, warmth, and support in addition to fair discipline. Dean was a perfectly normal boy without any sort of difficulties.

Adolescence

At age 16, Dean experienced the loss of his maternal grandmother, who was particularly close to him and very involved in his life, which was devastating to him. He left school at age 18 and went to a university to study chemical engineering. When interviewed at age 18, the interview took place in a hall of residence, where he stayed. Dean seemed to be very satisfied with his university life. He usually spent his time either studying or going to a university disco/bar. He sometimes went around in a large group of his university mates, taking pictures, going for a drink, and going to parties. However, he explained that when he was going around in a group, he always tried to avoid being involved in any trouble, such as fights. He did not smoke or take drugs, although he had had the opportunity to try. Dean recounted his involvement in two fights in the previous three years. He had a fight with his schoolmate when he was 15; his mate kept annoying him, tapping him and twisting his arm,
4.6. Case 813 Dean (CNC families)

and Dean told his mate to pack it up, but his mate carried on nudging him. Subsequently, Dean pushed his mate in the face and broke his nose. Dean thought that his mate started it, but in fact, he started it – he actually threw the first blow. The other fight he got involved in was a group one, where a group of other kids came into his youth club and started trouble. Dean admitted having bought stolen goods six times in the previous three years and felt guilty about it. During adolescence, Dean had not participated in any delinquent activities at any time, apart from a few instances of buying cheap stolen goods.

Young adulthood

At age 21, Dean was living with his wife in a two-bedroom house, which they bought with a mortgage. He was married three months before the interview. At the time of the interview, Dean was working as an export manager for guns. He dropped out of college a year after his first year and returned home because he realised that he could not get a job in chemical engineering. In his young adulthood, Dean still showed no signs of antisociality. He still did not smoke or take drugs, and he drank about the same since he was married. However, Dean reported having had sexual intercourse with seven different girls in a period of two months when he had a bust up with his girlfriend (his present wife), which the interviewer doubted. Considering his youth, he seemed to have done very well for himself. He had managed to buy his new house and hold a responsible job. He was self-assured, stable, and settled in his style of life. It was interesting that he had dropped out of college, justifying it in terms of becoming an unemployable chemical engineer. This perhaps reflected a certain pragmatism in his personality. Throughout his early adulthood, Dean never did anything that could have led to a criminal conviction.

Adulthood

When interviewed at age 32, Dean lived with his wife and two children in his own three-bedroom terraced house. Dean’s working pattern was stable, having had three jobs during his life. Dean was very happy with his current job as an assistant branch manager and said that he would be promoted to a branch manager soon. Dean and his wife had two children, aged 6 and 4. His children had some behavioural problems, such as lying, temper tantrums, sleep disturbances, bullying, and bedwetting. Dean tried to spend time with his children, although a lot of time was spent on his work. He admitted that he liked sitting back and just observing them if they were playing. When his children were naughty, Dean usually
4.6. Case 813 Dean (CNC families)

reasoned with them, but he said that he was a bit old-fashioned in this respect, so if they were
totally out of line, he would smack them. He believed that strict discipline develops a good
character in children, which was different from that of his wife. Dean got on quite well with
his wife, but they regularly had rows. Dean enjoyed drinking, and he explained this because
of the nature of the business. Dean seemed to have no qualms about his drinking, and it was
very unlikely that he would reduce his drinking. He self-reported making illegitimate tax
claims when he was self-employed and taking a sort of bribe (around £10) from his
customers when he worked as a gun trade exporter. The impression Dean gave was of an
optimist with a very good sense of humour. This facet of his character might have masked
any problems he had; he seemed very committed and concerned about his children, but there
seemed to be a question mark over his relationship with his wife – it was a question of what
was not said rather than what was. Dean came over as an intelligent and strongly motivated
individual.

Dean was re-interviewed at age 47. He had moved out of London 15 years earlier
because of his job and for his children’s sake. Dean was a self-employed financial consultant,
selling and giving advice on all financial products, and he was very happy with this. Dean
drank less than in previous years, and he still did not smoke or take drugs. He was never in
any sort of trouble, such as in fights. Dean described his childhood as very happy, growing
up in a strict but fair family atmosphere, and usually being smacked or reasoned with if he
misbehaved. Dean and his wife always knew where the children were going when the
children went out. They usually agreed about how to control them but sometimes disagreed
over privileges – not over punishment but over rewards. Dean seemed to enjoy his life most
of the time, and he was one of the most friendly, talkative men in our study. The impression
Dean gave to the interviewer was of a man who was genuine enough in his laughter and
manner to put his clients at ease. His sociability probably helped him to enjoy his work which
took up much of his time – about 50 hours a week. Overall, there was no doubt that Dean
led a non-criminal and stable life. Dean had done very well for himself all his life – he
managed to buy his house, hold a responsible job, and never went through a period of being
out of work.
4.6. Case 813 Dean (CNC families)

Dean’s wife (G2F) – Not convicted

Dean’s wife was interviewed when she was 47 years old. At the time of the interview, she was working as a health record officer. She met Dean at a youth club when they were 18, and it had been 27 years since she married him. When she was young, she never got into trouble, and her childhood behaviour was not problematic at all. She left school at age 16. Her relationship with Dean seemed to be not going very well. She talked of Dean with negative feelings; she mentioned that she could not trust him completely. When she was aged 33, she experienced a period of severe depression because of her relationship with Dean. They had been separated for conflict reasons for almost two years, and this separation might have left the children struggling emotionally. She mentioned that Dean had another two children, apart from the two children she and Dean had together, which Dean did not mention at all in his interviews. When it came to disciplining the children, Dean and herself sometimes agreed on how to raise them but also sometimes disagreed about what to do when they were naughty. She was sometimes worried that Dean was too strict with them, but at the same time, he spoiled them too much. Overall, she appeared completely normal, and her life showed no signs of antisociality.

Generation 3 (G3)

Child 1 (G3M) – Not convicted

Nelson, who had not been convicted, was interviewed at age 26. At the time of the interview, he was working as a deputy general manager, licensing health and safety issues in a nightclub, and he was very happy with this. He was living with his three friends in a privately rented house with four bedrooms and two bathrooms. Since leaving school at age 18, Nelson had had three different jobs, but all in the same company. Nelson had a 5-year-old boy from his previous relationship that lasted for three years. He could not give information about his son, who lived elsewhere with his ex-girlfriend. From an early age, Nelson manifested behavioural problems, such as impulsiveness and temper tantrums. Before the age of 15, he started playing with fires, stealing, lying, running away from home, and engaging in risky behaviour, such as climbing and playing chicken in traffic. He also did things against the law, but he was not caught, such as using and selling drugs or driving after drinking. At school, Nelson frequently truanted and sometimes had trouble paying attention. Nelson described his childhood as happy, mentioning the strict discipline in the house, and
4.6. Case 813 Dean (CNC families)

often being smacked or hit by his parents. As far as he remembered, his parents always knew his whereabouts, activities, and playmates. Nelson seemed to be, for all his childhood, adequately supervised by his parent, who seemed a strict disciplinarian.

Nelson’s lifestyle in young adulthood seemed to be casual and irresponsible. He reported having regularly driven after drinking since he was aged 18 and having regularly consumed cannabis from age 14 and cocaine from age 20. He stopped taking drugs because he saw that some people had died of drug abuse. The impression given by Nelson was of a relaxed and confident nightclub manager living in a trendy shared house with other young men. Given his lifestyle, the interviewer was surprised at how few drugs Nelson had taken recently. He explained that none of the people in his house was very keen on drugs. Nelson clearly showed a mild form of deviance here and there. For example, whilst as nightclub employees, they were allowed to drink for free, he often took some drink home, which was technically theft. Nelson had a casual sexual involvement with six different women and got into numerous fights; he remembered approximately 98 fights in the previous five years, mostly in his workplace, a nightclub. His tendency to get involved in fights seemed to be quite strong. He might have inherited a certain amount of his father’s impulsive personal traits, which were likely to make him prone to risky activities, including drinking, and drug use, fighting. On the PCL:SV, his level of psychopathy was 8, with 4 points on Factor 1 (affective/interpersonal) and 4 on Factor 2 (irresponsible/antisocial lifestyle). Surprisingly, Nelson had yet to be convicted of any offence, but it seemed very likely that he would commit a crime in the near future unless he changed his workplace and lifestyle.

Child 2 (G3M) – Convicted

Douglas was interviewed at age 24. At the time of the interview, he was living with his parents. Douglas was a self-employed roof-tiler and had stayed in this job for six years since he left school at age 18. Douglas had a steady girlfriend with whom he had been for five years, but he believed that their relationship would not last long because they had frequent violent rows. Douglas showed, from an early age, some antisocial behaviour and impulsiveness. He had some temper tantrums, was often easily annoyed by others, and liked engaging in risky behaviour. Before the age of 15, Douglas threatened, bullied, and intimidated other children, sometimes initiated physical fights, and sometimes stole or did shoplifting. Since he was 15, Douglas did things against the law, but he was not caught, such
4.6. Case 813 Dean (CNC families)

as taking cannabis and LSD, driving after drinking, and speeding. Douglas described his childhood as happy; he mentioned that he was brought up by his parents, who usually smacked him and occasionally hit him if he misbehaved, and the discipline he received was not very strict. As far as Douglas remembered, the relationship between his parents was not very good, and his parents were seemingly indifferent to his whereabouts and activities. His relationship with his mother was good, but not with his father, who was frequently absent from home. Douglas seemed to be, for all his childhood, poorly supervised by his parents, especially by his father, who was neglectful, and this might have increased his risk of participation in antisocial behaviour in his childhood.

In his young adulthood, Douglas’s level of antisociality continued to be high. He regularly got into fights, smoked a lot, and drank heavily. He even started the day with a drink. He got into 6 fights in the previous five years, all of which occurred in a pub; he kicked and punched someone. Douglas mentioned that he did not feel guilty for fighting because others started it, for taking things from work because everyone did it, and for shoplifting because he did not know the victims. He clearly had the propensity for aggressive and impulsive behaviour towards others, and this was seen to greatly increase his risk of being involved in acts of violence. During the interview, Douglas was not fully cooperative; he did not say much but just answered questions directly. The interesting that Douglas said in the interview was that his father had recently told him that he had a daughter and son, aged 12 and 9, respectively, from another relationship. Douglas and his older brother, Nelson, knew nothing of this until recently, and both seemed to be definitely shocked to learn that his father had two children other than themselves. Douglas was convicted for two offences; both offences were causing fear of violence or provoking violence. His first offence occurred at age 22, and the last offence at age 25. As with his older brother, Douglas might have inherited a certain amount of his father’s impulsive personal traits, which were likely to make him prone to risky activities, including drinking, drug use, fighting, driving after drinking, and smoking. His level of psychopathy, measured by the PCL:SV, was 6, with a score of 3 points on the affective/interpersonal factor, and 3 on the irresponsible/antisocial lifestyle. This is a lower score than his older brother’s.
Birth of Dean’s mother (G1F)

1928
- Working-class family
- Parental harmony
- Left school at age 14

Strict, dominating father

Married at age 22

Gave birth to Dean at age 24

Harsh discipline – threats, withdrawal of love

Overanxious, overprotective, mildly neurotic

Had been working as a typist all her life

Birth of Dean (G2M)

1925
- Poor, large family
- Very strict parents
- Had a son, Dean at age 27

Frequent parental conflicts

Married at age 25

Left home and served in the navy at age 17

Strict discipline

Convicted of theft from work at age 33

Had been working as a carpenter for many years

1968
- A wealthy family
- Excellent school reports
- Had been working as a typist all her life

Parental support, warmth

Bought stolen goods several times between ages 15-18

Dropped out of college a year after his first year

A caring, family loving man

A tidy, unaggressive, quiet boy

Very ambitious for Dean

Very ambitious for Dean

Birth of Dean’s father (G1M)

1928
- Parental harmony
- Married at age 22

-parental ambition for Dean

1953
- Parental disharmony

1968
- Marital disharmony

1974
- Left school at age 18 and went to a university

- Married at age 21

- Left school at age 18 and served in the navy at age 17

- Very strict parents

- Had a son, Dean at age 27

- Dropped out of college a year after his first year

- Had been working as a carpenter for many years

Figure 11: The life course of Dean’s parents (up to Dean married at age 21) – G1-G2 generation (Case 813-CNC families)
Figure 12: The life course of Dean’s children (beginning with Dean married at age 21) – G2-G3 generation (Case 813-CNC families)

1974
Dean (G2M)
- Had a son, Nelson at age 25
- Managed to buy his house and hold a stable job

1978
Birth of Dean’s son, Nelson (G3M)
- Being smacked or hit by parents
- Adequate parental supervision
- Started taking drugs from age 14
- Left school at age 18
- Had a son from a previous relationship at age 21
- Drank heavily
- No criminal offence until the age 26

1977
- Married at age 21

1981
Birth of Dean’s son, Douglas (G3M)
- Had temper tantrums, engaged in risky behaviour
- Being smacked by his parents
- Frequent absences of his father
- Started taking drugs from age 15
- Heavy drinking, drug use, fighting
- Lacked any sense of guilt

1982
- Impulsiveness
- Poor supervision, lax discipline
- Parental conflict
- High delinquent involvement
- Left school at age 18
- Aggressiveness, impulsiveness

2005
- Convicted of causing fear of violence at age 25

2001
- Casual, irresponsible lifestyle
- Got into numerous fights, had casual sexual involvement

2006
- No smoking, drunk driving, drug use, fighting

2007
- Separated from his wife for two years

2011
- No criminal offence until the age 47

- Managed to buy his house and hold a stable job

2017
- Happy childhood
- Reasoned with his children
- Separated from his wife for two years
- Stable job records
- Regularly drove after drinking since age 18

Birth of Dean’s son, Douglas (G3M)
- Being smacked by his parents
- Frequent absences of his father
- Started taking drugs from age 15
- Heavy drinking, drug use, fighting
- Lacked any sense of guilt

1974
Dean (G2M)
- Had a son, Douglas at age 28
- Strict discipline
- Parental conflict
- Lacked any sense of guilt
- Convicted of causing fear of violence at age 22
- Managed to buy his house and hold a stable job

1978
Birth of Dean’s son, Nelson (G3M)
- Being smacked or hit by parents
- Adequate parental supervision
- Started taking drugs from age 14
- Left school at age 18
- Had a son from a previous relationship at age 21
- Drank heavily
- No criminal offence until the age 26

1977
- Married at age 21

1981
Birth of Dean’s son, Douglas (G3M)
- Had temper tantrums, engaged in risky behaviour
- Being smacked by his parents
- Frequent absences of his father
- Started taking drugs from age 15
- Heavy drinking, drug use, fighting
- Lacked any sense of guilt

1982
- Impulsiveness
- Poor supervision, lax discipline
- Parental conflict
- High delinquent involvement
- Left school at age 18
- Aggressiveness, impulsiveness

2005
- Convicted of causing fear of violence at age 25

2001
- Casual, irresponsible lifestyle
- Got into numerous fights, had casual sexual involvement

2006
- No smoking, drunk driving, drug use, fighting

2007
- Separated from his wife for two years

2011
- No criminal offence until the age 47

- Managed to buy his house and hold a stable job

2017
- Happy childhood
- Reasoned with his children
- Separated from his wife for two years
- Stable job records
- Regularly drove after drinking since age 18

Birth of Dean’s son, Douglas (G3M)
- Being smacked by his parents
- Frequent absences of his father
- Started taking drugs from age 15
- Heavy drinking, drug use, fighting
- Lacked any sense of guilt

1974
Dean (G2M)
- Had a son, Douglas at age 28
- Strict discipline
- Parental conflict
- Lacked any sense of guilt
- Convicted of causing fear of violence at age 22
- Managed to buy his house and hold a stable job
4.7. Case 680 Calum (NCC families)

The description of Calum’s family

Calum was born in 1953. He came from a large family of five children and was the much loved only son amongst four sisters. The family lived in a cramped three-bedroom flat, which was excessively overcrowded, shabby, and dilapidated. There was no hot water, no bath, and no sitting room. Calum’s paternal grandmother lived in the downstairs bedroom and always stepped in and helped with the children. Nevertheless, Calum’s family seemed to be quite secure and comfortable; they had a little car in which they went out at weekends and were able to afford a holiday most years. It seemed to be only housing which was somewhat an issue.

Discipline seemed very permissive, except that the mother occasionally lashed out. The parents were of very different temperaments and standards, and so there must have been a certain amount of inconsistency due to the mother’s irascible temperament and the father’s placid passiveness. The parents seemed to be backing each other up in everything, and the father was holding things together with his calm and stable dispositions. On the whole, Calum’s family gave the impression of being a warm-hearted, friendly family on excellent terms with one another and with no significant problems of any sort, other than the mother’s extreme nervousness. Seeing the family of Calum in action made one feel that they were a loving and united family.

Generational 1 (G1)

Calum’s mother (G1F) – Not convicted

Calum’s mother, who had not been convicted, came from a very large family of 10; two of them were half-brothers from her mother’s first marriage. She had a miserable and rebellious childhood, with her father being extraordinarily strict and cruel. Her father used to beat the children, and they never dared to speak out against him. All the siblings hated him and left home as soon as they could. She left school at age 14 and went straight to work as a machinist. She stayed in this job until she was married at age 19. Calum’s mother was described by the interviewer as a loving neurotic mother who was certainly overanxious about the children and worried about them. She tended to spoil the children and defend them like a tigress if she thought anyone was attacking them. On many occasions, she paid her neighbours who attacked her children by literally giving them a good hiding. When the children were naughty, she usually threatened them, for example, by saying: “Don’t push me
4.7. Case 680 Calum (NCC families)

too far”. She also hit them but only over the legs, though quite hard at times. Her husband
died in 1964, and since then, she had been mentally disturbed. This culminated in what she
described as a complete nervous breakdown. She often found it almost impossible to cope
with every day, and it was no wonder that her mental problems hindered her ability to
properly bond with the children and contributed to the lack of affection and supervision that
the children needed to contain their emotional instability and distress. When interviewed in
1968, she was able to talk easily about her husband, who she described as a very good, gentle
man who was extremely well thought of by everyone who knew him. Calum’s mother had
not committed any offence. She was not very collaborative and refused previous contacts
with the CSDD projects for two years.

Calum’s father (G1M) – Not convicted

Calum’s father, who had not been convicted, came from a family of three children;
one of them was a half-brother from his mother’s second marriage. His parents split up when
he was only 3 years old, and since the divorce, he had been brought up by her mother and
stepfather. His parents were not particularly well off, but they were warm-hearted, loving,
and close-knit together. He described his mother as a friendly, kindly old soul, and his
stepfather as a very quiet, kindly man whom he loved as if he were his own father. He left
school at age 14 and went straight to work. He had been working as a sales manager for T.V.
for the last 15 years, and he was completely satisfied with it and was doing very well indeed.
Calum’s father was married at age 24. He was a very permissive father with no rules or
standards of behaviour. He stated that he felt nothing special and never punished the children
when they misbehaved. He had never been known to lose his temper with the children. He
was a friendly father who was always ready to listen to the children and liked going out with
his family. One of his daughters described him as a very kindly, un-nervous, calm one with
whom she could have long conversations. On the whole, Calum’s father gave the impression
of being calm, generous, intelligent, cooperative, devoted to his family, and very frank and
open in his descriptions. He had had poor health all his life. In 1964, he was dangerously ill
with bronchiectasis, and a few months later, he died. His death was a tremendous shock to
all family members. Calum’s father had not committed any offence without any signs of
antisociality.
4.7. Case 680 Calum (NCC families)

Generation 2 (G2)

Calum’s siblings

Calum had four sisters. Claire, Calum’s older sister, described herself as more placid than the rest of the family. She always found herself separated from the family, so she was uninvolved and did not show her feelings toward the family. She married and left home at age 19. Jamila, Calum’s older sister, was the sort of person who would stick up for herself and take on a fight with anybody. She married and left home at age 17. Linda was an easy, well-spoken, and charming girl who was very fond of animals and brought home tortoises, birds, and anything she found outside. Stella was the youngest in the family, a three-year-old girl. She was an unwanted baby, but she was now much loved by her family. None of his sisters appeared to have been particularly brainy or brilliant at school, but the two older girls were doing well in their jobs. They left home and lived elsewhere, but they still saw a great deal of their mother.

Calum (G2M) – Convicted

Childhood

At age 8, Calum behaved aggressively, overactive, completely fearless and recklessly, and his behaviour always got on his mother’s nerves. His temper was quite unpredictable and serious, so the family never knew whether he would flare up or take it peacefully. At school, Calum was said to be well, and he was unshy, very sociable, and more active than other schoolboys. At age 10, Calum experienced his father’s death, which was very traumatic for him. According to his mother, Calum was very attached to his father, and he became rebellious from the moment he knew of his father’s death. However, it seemed that his mother was in such a depressed and agitated state of mind that his exuberance and liveliness were just too much for her. From age 14, Calum got into so much trouble for refusing to do his homework and not going to school on one excuse or another. He was frequently caught by the police or taken to the police for stealing. On one occasion, Calum and his friends were cautioned for riding around in an abandoned vehicle. His mother was nevertheless pleased on the whole with Calum, who was very solicitous when she was ill and worried a great deal about her. Calum was clearly seen as a vulnerable and high-risk child. In his childhood, his mother’s poor mental health might have negatively affected Calum’s psychosocial development, along with his father’s death.
4.7. Case 680 Calum (NCC families)

Adolescence

Calum left school at age 15 and started an electrician apprenticeship at age 16. He was very enthusiastic about his job and expected to be an electrician. Calum reported that his family had recovered since his father died – before his mother did not care about anything. When interviewed at age 18, Calum was living with his mother and younger sister in a less crowded home, as his paternal grandmother died three weeks before the interview, and his three older sisters lived elsewhere. Calum did not smoke or take drugs but went out for a drink with his mates every weekend. He started to associate with some antisocial peers, and Calum and his peers often got in trouble with the police, and his anti-police attitude strengthened. When asked about his involvement in fight, Calum claimed that he never started any fight but admitted that he used to carry the tools in his toolbag on his scooter under the seat. At age 19, Calum was convicted of theft with his friend James who was also our study boy. He and James stole tyres and wheels from an abandoned car on the street. They were given a 12-month conditional discharge. The impression Calum gave to the interviewer was of an intelligent, ambitious (he wanted to get as many qualifications as he could), and humorous boy who was fluent and forthcoming in the interview situation. Calum mentioned that when he looked back on himself, he was a typical bad boy at the time when he lost his father, but now he felt that he had quietened down. However, he seemed to be easily by his antisocial companions. Therefore, it was unlikely that he would avoid being led into trouble unless he remained a friend of James and Scott; both were also our study boys with a high level of antisociality.

Young adulthood

Calum was interviewed at age 21. He was just engaged to be married and hoping to get married once he got home – perhaps two years later. He drank reasonably, and he did not smoke or take drugs. He usually spent most evenings out in couples with his fiancée, going to the pub or a club. Calum self-reported stealing goods from work – 8 occasions in the last two years; he regularly stole gear and sometimes oddments of cable from work, about once every three months. In his young adulthood, Calum was clearly less likely to get into trouble. He mentioned that he was older now and did not go round with his mates, although he still remained a friend of James and Scott. James was in prison at the time of the interview, and Calum cited James’s imprisonment as a reason for his own non-delinquency. However,
4.7. Case 680 Calum (NCC families)

it was very strange that neither James nor Scott mentioned Calum in their interviews, although they both mentioned each other, which made the interviewer whether Calum was a real friend of James and Scott. During interviews, Calum was cooperative but ‘careful’ about his responses. He concealed his conviction from the interviewer, which seemed to be due to the image he had of himself and wished to convey to others. Calum was reasonably intelligent and fairly successful jobwise, being awarded a prize this year as a top apprentice electrician in the UK and having passed his technical exams. The impression Calum gave to the interviewer was of a temporary delinquent.

Adulthood

At age 32, Calum was interviewed in his own 8-bedroom house, which he claimed was the best in his neighbourhood. He was living there with his wife and three children, two sons and one daughter. Calum had moved out of London once he was married at age 22 because it was cheaper to get a house. He was a self-employed electrical engineer and was very happy with his job. Since he was 26, he had never had any period of unemployment, and he was financially shrewd. Calum got on very well with his wife, although he had rows with her every day. He mentioned that he and his wife had strong characters. His wife fought like a man; she came in and hit him with her knee, and Calum was all for protecting himself and getting out of the way. Calum and his wife usually agreed about how to control the children, but his wife believed that strict discipline develops a good character in children, which was different from that of Calum. When his children were naughty, Calum usually smacked them or sent them to bed, but he admitted having sometimes used a shoe to beat them, although not very hard. Calum drank heavily and often drove after drinking – 25 times in the previous five years. He was not involved in any fight, nor was he in trouble in the previous year, but at age 27, he was convicted of dishonesty handling and was fined. The impression Calum gave to the interviewer was of a clearly sharp-witted and intelligent man, who was motivated by money. He appeared hopeful about his future and reasonably happy with his life.

Calum was re-interviewed at age 47. He was living with his three children in the same house where he was interviewed at age 32. He split up with his wife at age 44. Calum had been staying in the same job and seemed to earn much more than when he was interviewed at age 32. Calum had three children, aged 21, 19, and 15, respectively. When his
4.7. Case 680 Calum (NCC families)

children were before age 15, Calum always knew where they were going when they were out, and if they were very naughty, he usually smacked them. It seemed to be repeating the disciplinary style he experienced while growing up. Calum described his childhood as very happy, growing up in a strict but warm family atmosphere where his mother usually smacked him if he misbehaved. Calum committed two official offences, one was theft at age 19, and the other was dishonesty offence at age 27. Although he had not committed any offence for over twenty years, he could not recover from an antisocial lifestyle involving heavy drinking, driving after drinking, and sexual promiscuity.

Calum’s wife (G2F) – Convicted

Olivia, Calum’s wife, who had been convicted, was married to Calum when she was 20 years old. She lived with him for 23 years and was divorced at age 43. She was no longer living with Calum when he was interviewed at age 47, and she thus could not take part in interviews. Only limited information was available on her from Calum’s interview at age 32. Olivia and Calum had three children. When the children were young, they manifested some behavioural problems. They were into frequent lying, disobedient, had some temper tantrums, and got involved in destroying things. Olivia enjoyed everything with the children. She almost always knew where they were going when they went out, and when they misbehaved, she usually smacked as a form of punishment. Olivia seemed to be stricter with the children than Calum did. She admitted having beaten her children more than 10 times. Olivia committed one official conviction, which was drunk driving at age 50. She was banned from driving for a year.

Generation 3 (G3)

Child 1 – Convicted

Stephen, who had been convicted, was interviewed at age 26. Stephen and his young brother were living rent-free in a 4-bedroom house owned by his father. He had been working in his father’s business since he was 19, and he was very happy with this job. During his childhood (under age 12), Stephen often took many risks, like climbing a school roof, and since he was 15, he did many things that were against the law – but he was not caught, such as drunk driving, fights, and using or selling drugs. He never truanted at school but was suspended four times for mental bullying, fights, and drug dealing. Stephen described his childhood as very happy, although he mentioned that there were a lot of rules at home, the
4.7. Case 680 Calum (NCC families)

discipline he received was strict, and his parents did not get on well with each other. His parents usually smacked or sometimes hit him if he misbehaved, and they always knew where he was going when he went out. He left school at age 17. His parents were divorced when he was 19. Between ages 20 and 26, his lifestyle continued to be casual and irresponsible, involving heavy drinking, drunk driving, speeding, fights, and sexual promiscuity. Stephen committed three official offences: common assault and battery at age 20, assault occasioning actual bodily harm at age 28, and drunk driving at age 31. His level of psychopathy, measured by the PCL:SV, was 11, with a score of 6 points on the affective/interpersonal factor, and 5 on the irresponsible/antisocial lifestyle. This is a high score. The impression Stephen gave to the interviewer was of a sensation-seeking individual who took pleasure in risky behaviours. Stephen was a very prideful man with an aggressive personality. He mentioned that his pride was very important to him, which was why he could not avoid a fight. During the interview, he talked a lot and tried to present a positive image of himself. He did not want the interviewer to have a negative view of him or his family due to his occasional fights. Stephen’s tendency to get involved in fights was particularly strong, making it unlikely that he would remain free from violent crimes. He seemed to be a highly motivated, ambitious and, to some extent, money-oriented, deviant individual that was reminiscent of his father, Calum.

Child 2 – Convicted

Lorraine, who had been convicted, was interviewed at age 25. She was living with her partner in a three-bedroom house she had recently bought with him. Lorraine started living with him last year. She got on very well with her partner, but she had some rows with him monthly. She had been working as a mortgage broker for two years and was unhappy with her job because she had problems with her colleagues. During her childhood (under age 12), she often lost her temper, particularly with her parents and sometimes took risky behaviour, such as climbing, but she never got into trouble at school. Lorraine described her childhood as average, mentioning the strict discipline in the house, and usually being smacked and very occasionally hit by his parents. His parents always knew where she was going when she went out, and they got on very badly with each other while growing up. Her parents were divorced when she was 16, and her father raised her from age 16. She left school at age 18. At age 20, Lorraine started smoking and drinking quite heavily. She did not take
4.7. Case 680 Calum (NCC families)

Drugs or get involved in fights, but she drove after drinking ten times in the previous five years, and at age 25, she was convicted of drunk driving, which was her first offence. Her level of psychopathy, measured by the PCL:SV, was 5, with 4 items scored on the affective/interpersonal factor, and 1 item on the irresponsible/antisocial lifestyle. Lorraine came over as quite self-assured – asking questions such as what the interviewer thought of her. She claimed to be able to “read people” and described herself as “clever”. Like her brothers, Lorraine wanted to win the approval of her father, who she described as a “commanding” individual, and she did not let him know that she smoked and drank heavily. The fear of his disapproval appeared to keep her out of trouble (drugs, etc.). Lorraine admitted to being quick to verbalise anger, losing her temper easily, and being unable to take criticism, but these problems did not yet lead her into fights. She attributed this to witnessing her parents arguing when growing up. She would likely be at risk of future offending unless she cut down her drinking. Lorraine was a fairly friendly but somewhat deviant individual, just like her brothers.

Child 3 – Convicted

Richard, who had been convicted, was interviewed at age 22. He was living with his older brother in a 4-bedroom house owned by his father, Calum. He had been working as a business development officer for 4 years and was happy with this job. During his childhood (under age 12), Richard was an impulsive boy who often initiated physical fights and took risky behaviours. Although he sometimes had trouble paying attention, he never truanted or was suspended from school. Since he was 15, he got into more trouble, such as fights, speeding, and drunk driving. Richard described his childhood as happy, although he mentioned the strict discipline in the house, and usually being smacked and sometimes hit by his parents. His parents always knew his whereabouts, and they did not get on well with each other. At age 13, his parents were separated, and his father raised him from age 13. Richard left school at age 16. At age 18, his level of delinquency continued to be high. He smoked and drank a lot and spent most evenings out with his friends or brothers, going to the pub or a club. He often drove after drinking, was sexually promiscuous, and got into numerous fights in the previous five years, all of which occurred in the pub. This indicated that he was more likely to be violent and aggressive when he was drunk. Richard committed two official offences, one was common assault and battery at age 20, and the other was affray.
4.7. Case 680 Calum (NCC families)

at age 22. The PCL:SV was administered to him; his level of psychopathy was 5, with 1 point weighted on Factor 1 (affective/interpersonal) and 4 on Factor 2 (irresponsible/antisocial lifestyle). Richard appeared to be a confident but sometimes arrogant individual with an aggressive personality. He admitted getting angrier than he should and losing his temper often, particularly when drunk. It seemed that his aggressiveness triggered his problems in fighting, and his drinking habits caused him to be more aggressive and thus put him at a higher risk for aggressive behaviour. Richard was unlikely to be free from violent-related crimes unless he stopped drinking.
Figure 14: The life course of Calum’s children (beginning with Calum married at age 22) – G2-G3 generation (Case 680-NCC families)

1976
- Calum (G2M)
  - Had a son, Stephen at age 25
  - Had a daughter, Lorraine at age 27
  - Sleep disturbances
  - Average childhood
  - Sometimes engaged in risky behaviour
  - Smacked and occasionally hit by her parents
  - Parental separation at age 16
  - Left school at age 18
  - Habitual drunk driving
  - Separated from his wife at age 44

1978
- Birth of Calum’s son, Stephen (G3M)
  - Disobedience at age 7
  - Parental disharmony
  - Suspended from school
  - Took drugs from age 16
  - Left school at age 17
  - Convicted for speeding at age 21
  - Habitual drunk driving
  - Convicted for speeding at age 17

1981
- Birth of Calum’s daughter, Lorraine (G3F)
  - Parental disharmony
  - No school problems
  - Strict discipline
  - Stayed with her father
  - Heavy smoking, drinking
  - Started living with her partner at age 24

1984
- Birth of Calum’s son, Richard (G3M)
  - Happy childhood
  - Parental disharmony
  - Frequent fights
  - Financially secure
  - Convicted for speeding four times
  - Stayed with his father
  - Left school at age 16

1984
- Convicted of dishonest handling at age 27
- Had a son, Richard at age 31
- Heavy drinking, driving after drinking
- Adequate supervision
- Habitual drunk driving
- Separated from his wife at age 44
- Convicted for speeding four times
- Convicted of assault at age 28
- Drunk driving, fighting, sexual promiscuity

2000
- Parental separation at age 16
- Left school at age 18
- Habitual drunk driving
- Convicted for speeding at age 17
- Habited drunk driving

2006
- Convicted of drunk driving at age 25

2007
- Convicted of assault at age 20
- Convicted of affray at age 22

2009
- Having left school at age 1
- Strict discipline
- Parental separation at age 13

2009
- Had a son, Stephen at age 25
- Had a daughter, Lorraine at age 27
- Sleep disturbances
- Average childhood
- Sometimes engaged in risky behaviour
- Smacked and occasionally hit by her parents
- Parental separation at age 16
- Left school at age 18
- Habitual drunk driving
- Separated from his wife at age 44

2009
- Very happy childhood
- Often engaged in risky behaviour
- Mental bullying, fighting, drug dealing
- Sometimes hit by his parents
- Strict discipline
- Convicted of assault at age 20
- Convicted for traffic violation at age 25
- Heavy drinking, fighting
- Convicted of drunk driving at age 30

1978
- Married at age 22
- Lorraine at age 27

1976
- Married at age 22
- Lorraine at age 27

1978
- Very happy childhood
- Often engaged in risky behaviour
- Mental bullying, fighting, drug dealing
- Sometimes hit by his parents
- Strict discipline
- Convicted of assault at age 20
- Convicted for traffic violation at age 25
- Heavy drinking, fighting
- Convicted of drunk driving at age 30
4.8. Case 104 Jasper (NCC families)

The description of Jasper’s family

Jasper was born in 1953. He came from a large family of five children, all boys. He had another two half-sisters from his mother’s first marriage, and they were married and living elsewhere. The family lived in a shabby house on a somewhat dilapidated street. There was no hot water and no evidence of redecoration or smartening up. The house was overcrowded – 8 people in the house. Jasper’s maternal grandmother lived in a room upstairs in the house, and all five boys shared rooms. Despite all these, the mother was pleased to be in the house because at least the children could make as much as noise and did as they pleased. The parents were financially vulnerable and earned little. They were not interested in the children’s education, and they did not even know whether the children were getting on all right at school or not. The mother was extremely easy-going but sometimes got fed up and hit the children, and the father took very little interest in the family and left it all to his wife. Jasper’s siblings all got reasonably well, although they fought from time to time. The description of Jasper’s family given by the psychiatric social worker was of a close family with great loyalty to one another.

Generation 1 (G1)

Jasper’s mother (G1F) – Not convicted

Jasper’s mother, who had not been convicted, came from a very large family of ten children. She grew up in home with cold parents who always argued, where she lacked support and care from her parents. Her father died when she was 20. Her mother lived in a room upstairs in the same house, and she felt that her mother’s presence in the house was a bit interfering and difficult. Jasper’s mother had married before when she was 21. Her husband left her for another woman three years later. Her two daughters were now grown up and in close contact. Jasper’s mother remarried at age 28 and had five boys. It was difficult to assess the quality of her marriage because she showed little enthusiasm in her description of her husband. She described herself as a domineering partner in all matters concerning the home and the family. It could be inferred from the description of herself that her husband was irresponsible and dilatory in family matters. She was completely permissive and generous towards the children. She provided very little or no rules, rarely disciplined them, and allowed them to do almost anything. When the children were naughty, she stopped them by having a treat. However, she admitted that she sometimes felt infuriated and could not
4.8. Case 104 Jasper (NCC families)

bear it when the children were all scrapped, which was the only thing that made her cross. Jasper’s mother was a maternal kindly woman, not particularly demonstrative, not very bright. She was not sociable with outside people and did not enjoy drinking or mixing with a crowd. During the interviews, she was frank and cooperative but with little insight. Jasper’s mother had not committed any offence, but she was summoned because she laid about one of her neighbours after being told that the neighbour called her daughter “the little baster”. She was bound over to keep the peace for 12 months and had never had any dealings with a court since.

Jasper’s father (G1M) – Not convicted

Jasper’s father, who had not been convicted, grew up in a large family of seven children. He was quite clever, but he left school at age 14. He said that it was because he lacked the will to take any responsibility and could not be bothered to do well in his life. He had been working as a post office engineer since he was 28, and he was very satisfied with this job, although he learned little. He was married at age 33. He was an irresponsible sort of man who was sociable, happy-go-lucky, easy with money, and easy come and easy go. He took very little interest in the family and always went out to have his drink. He did not seem to be an important member of the family, but his wife used him as a final threat if the boys were scrapping, and she let him step in and slap them if necessary. He was an erratic and unpredictable father. He often suddenly got irritated by the children’s minor misbehaviour and hit them. He himself swore but could not bear the children to use bad language and was very strict about that. All in all, Jasper’s father was a selfish unpredictable man, not willing to cooperate in our study. He had not committed any offence.

Generation 2 (G2)

Jasper’s siblings (G2)

Jasper had four brothers. Matthew, Jasper’s eldest brother, left school at age 16 and had numerous jobs. His mother was worried about him because he did not know what he wanted to do except that he must earn a lot of money. Unlike the other boys, he did not talk to his parents and would not be helped. Jeremy, Jasper’s older brother, was a great home-loving boy who was very devoted to the family and willing to help his mother and step into her shoes when she was out. His mother told a story of Matthew and Jeremy’s court appearances, which was very serious and happened in 1968 when Matthew was 20 and Jeremy
4.8. Case 104 Jasper (NCC families) was 19. They were falsely charged with attempted murder and causing grievous bodily harm. They were remanded in custody and spent four months at a remand centre under very strict conditions, and in the end, Matthew and Jeremy were acquitted on any charges. Matthew and Jeremy suffered considerably from this. While Matthew stood up to it very well, Jeremy was very upset by the confinement, and since then, Jeremy had not been well for a long time.

Warren, Jasper’s older brother, got into trouble several times. At age 14, he stole things and was put on a year’s probation. At age 23, he was caught driving without a licence and disqualified from driving for 18 months. Gilbert was the youngest brother. He was not well when he was little. At age 7, he had a heart operation and was hospitalised for six weeks. At age 10, he went through a period of being difficult and disobedient. All of his brothers displayed mild forms of negative deviance.

**Jasper (G2M) – Convicted**

**Childhood**

Jasper was a rather restless, fearless, careless, and easy-going boy who was always out of doors and wandered off a good deal. Jasper got himself a little bit into trouble with lying, but nothing was serious, and he got his tantrums, but once again, nothing was serious. At school, he was relatively slow in learning but went without difficulty, and there was no problem with his progress at school. Jasper did not truant from school or steal elsewhere, and his mother said that it was because Jasper was too scared to do that. He had many new friends whom he played football with and went swimming. Jasper was particularly close to his brother, Matthew. Although he was moody and sometimes lied to get out of trouble, his behaviour in childhood was not particularly problematic. The psychiatric report indicated that his behaviour at age 11 was improved, and he seemed to be settled down and more grown up, even though he had some behavioural problems.

**Adolescence**

In adolescence (especially between ages 14-16), Jasper started going with a group of older boys and not coming home until night. At age 14, the police stopped him to turn out his pockets on several occasions when hanging out with them. His mother was very anxious about Jasper being led astray or involved in trouble just by accident. She threatened him that his brother-in-law would hit him if he was caught with them (on her instructions). Despite initial disagreement, Jasper obeyed his mother, gave up seeing this group, and had a new
4.8. Case 104 Jasper (NCC families)

friend of his own age whom his mother approved of. Jasper seemed very careful because of what had happened to his older brothers (Matthew and Jeremy’s court appearances in 1968). His mother was pleased on the whole with how Jasper was turning out, but she still complained that he was dissatisfied with his pocket money and that he did not make any attempt to get himself a job which she felt he should. Jasper left school at age 16, and his parents did not mind his leaving. During his adolescent years, it was typical of the situation in Jasper’s family that his mother dealt with the boys’ troublesome behaviour and that the figure of authority she involved was her son-in-law, not her husband. Jasper did not come across as heavily deviant, apart from one occasion of shoplifting at age 16.

Young adulthood

When interviewed at age 18, Jasper was unemployed. Since he left school at age 16, he had had four different jobs, with a short time working in each other. Jasper started taking drugs, usually with his mates. He did not smoke but drank quite heavily, such as that in one evening he managed to drink seven pints of beers. Jasper believed that drinking just made him want to have a laugh and did not make him aggressive at all, but the fights he got involved in the previous three years occurred at a pub or in a club when he was drunk. At age 18, he was accused of being drunk and disorderly twice. Jasper displayed his antipolice attitude: ‘I’ve been nicked twice just for walking along the road, not drunk and disorderly, just being drunk. They just picked on me cause they’d got nothing else to do’. Jasper recounted his antisocial experiences, which included stealing a scooter, stealing from phone boxes, breaking and entering old houses and ripping all the lead out, and buying cheap or accepted things known or suspected of being stolen by someone else. Jasper was involved in group fights when he was little, and he mentioned that he used to carry a cosh a couple of years ago when he was at school.

Jasper was interviewed at age 21. He was working as a pipe fitter. He was married at age 21, and his wife was expecting a baby next year. Jasper mentioned that, since he was married to her, he had tried to avoid using drugs, drinking alcohol, and being involved in any fights, although he still went around with a group of four or more mates. Jasper was reasonably friendly and cooperative, but he was rather selfish, without consideration for others (note the failed appointments and the lack of apology for them). Jasper’s behaviour
4.8. Case 104 Jasper (NCC families)

improved after his marriage, and he was less involved in antisocial activities in early adulthood than before.

**Adulthood**

Jasper was interviewed at age 32. He was living with his wife and three children in a council-rented five-bedroom maisonette. Jasper was employed full-time as a night porter and stayed in this job for eight years. His relationship with his wife was going very well, despite some times when they had rows during which they just kept quiet. They had three children, two boys and one girl. Jasper said that he and his wife usually agreed on how to control the children. When the children were naughty, Jasper sent them to their room or early to bed. He believed that sending them to bed cured everything because they cried worse if they were sent to bed than being smacked. Jasper went out less than once a week. He did not take drugs, nor did he get into fights. However, he drank heavier than before and drove after drinking three times in the previous five years. At age 32, Jasper was seen as a simple, straightforward person without any complications to his nature. He seemed to work hard and regularly. He was dedicated to his family and had a happy, supportive relationship with his wife; other than that, there was not a great deal to say about Jasper. He did not come across as either delinquent or deviant. He was a sincere, honest person who was getting on his wife.

At age 46, Jasper was re-interviewed. He was living with his wife and two sons in his own five-bedroom house, which was very clean and well-decorated. His daughter left home and lived somewhere independently. Jasper was pleased with his current work as a warehouse fork truck driver. His relationship with his wife was still going very well, and they never rowed. His children had some behavioural problems, such as restlessness, lying, truancy, stealing, disobeying, fights, and temper tantrums. When they were naughty, Jasper usually smacked them. It seemed to be repeating the disciplinary style he experienced while growing up. Jasper described his childhood as average; he mentioned that his parents usually smacked him and sometimes hit him if he misbehaved, and the discipline he received was not very strict. Jasper continued drinking heavily but had never appeared to court in the previous five years. Jasper committed two official offences, all of which were an offence of obtaining by deception. At age 28, Jasper and his wife obtained goods from shops using stolen cheque books. It seemed that he used crime to obtain foodlift, which the interviewer found interesting and, at the same time, understandable, given Jasper’s very low income plus
4.8. Case 104 Jasper (NCC families)

his wife and three children to support. The impression Jasper gave was of a latecomer to crime. His criminal career started at age 28, and his last official conviction was at age 31, including time served in prison (6 weeks). Jasper was a very nice and hospitable man who seemed to lead a stable and happy life.

**Jasper’s wife (G2F) – Convicted**

Flora, Jasper’s wife, who had been convicted, was interviewed at age 44. When she was young, she never truanted from school and had no particular problems. She left school at age 15. Flora met Jasper through her brother’s friend when she was 15, and she was married to him at age 18. Flora enjoyed playing, reading, and dancing with her children, and she always knew where they were going when they were out. When the children were naughty, she usually smacked them, scolded them, or sent them early to bed. She commented that she sometimes threatened them with a stick, but they did not take much notice of her. Jasper and herself completely agreed over how to control the children, but she thought that Jasper took lax attitude toward discipline. Flora appeared to be happy with him, apart from some rows. She recounted her rows with him and admitted that in the previous year, she slapped him and threw an object at him that could hurt him, which was contrary to what Jasper said in the previous interviews. Flora described Jasper as a person who was somewhat careless, impulsive, rushed into things without thinking about what might happen, and sometimes had problems finding or keeping his jobs. Flora thought that Jasper drank too much, and his drinking created problems between them. She saw herself as an impulsive person who acted without thinking and drank too much, just like Jasper. She admitted having stolen things from work, such as pens and pads, but she did not mention the offence she had committed some years ago. Flora committed one official offence at age 25, and she did it with her husband, Jasper. As with Jasper, she seemed to use crime to obtain foodlift. Since then, she had not committed any further offence.

**Generation 3 (G3)**

**Child 1 – Convicted**

Boris, who had been convicted, was interviewed at age 29. He had a girlfriend before, with whom he lived together, but he split up last year and returned to live at his parents’ home. Boris previously worked as a lift fitter for almost six years, but he left because the company was liquidated. He started working as a life engineer a year ago. During his
4.8. Case 104 Jasper (NCC families)

childhood (under age 12), Boris engaged in risky behaviours and deliberately destroyed things, such as phone boxes. At age 11, Boris had a fascination with fire and often set fires. At school, he only occasionally truanted and sometimes had trouble paying attention to classes. He left school at age 15. Boris described his childhood as happy, mentioning the lenient discipline in the house, but usually being smacked and sometimes hit by his parents. His parents sometimes knew his whereabouts. As a young adult, Boris led a lifestyle of socialising heavily on the weekend, playing football and drinking for hours in the pub. He took drugs from age 15 and was a drug abuser, consuming various drugs, such as cannabis, coke, magic mushrooms, and ecstasy. He drove after drinking once in the previous five years, having done this since he was 20. Boris initiated one fight in the previous five years, which related to a night out in a club with his sister and ex-girlfriend. A man tried to engage in conversation with his ex-girlfriend, and Boris told him to stop. The man poured a drink over her, and this caused him to react by “badly beating him up”, leaving him in bad condition on the floor. Boris expressed that he “got what he deserved” and felt justified in doing what he did. Boris was far from being empathetic. Boris attempted suicide once. Boris committed one official offence at age 26, which was drunk driving. The PCL:SV was administered to him; his level of psychopathy was 5, with 3 points weighted on Factor 1 (affective/interpersonal) and 2 on Factor 2 (irresponsible/antisocial lifestyle). The interviewer felt that he minimised his antisocial activities as a younger or up to his day. Boris was living an active, irresponsible life, with some of his antisocial habits affecting him.

Child 2 – Convicted

Troy, who had been convicted, was interviewed at age 28. He was living with his wife and a seven-year-old daughter in a council-rented two-bedroom house. He previously worked for about five years as a site foreman, which he thoroughly enjoyed, but he lost this job due to his driving ban. He currently worked as a porter, but he was unhappy with this job. Troy was married at age 25. He claimed that the relationship was very good, but the manner the couple communicated to one another and about one another and their body postures told a different story. They sat at the extreme ends of the sofa, and their words expressed did not match their expressed emotions. They often had violent rows and split up twice due to Troy cheating on his wife. They had a 7-year-old daughter, and she started
4.8. Case 104 Jasper (NCC families)

bedwetting, lying, disobeying, fighting, destroying things, and having some temper tantrums from age 3. When she misbehaved, Troy usually smacked, scolded, or ignored her.

During his childhood (under age 12), Troy often took risks, initiated physical fights, and stole small things from shops, such as toy cars. He claimed that this was attention-seeking behaviour from his mother. Since age 15, Troy self-reported high levels of involvement in delinquency, including breaking and entering, stealing from parked cars, carrying a knife, selling drugs, claiming benefits by lying, and doing graffiti. He excused his antisocial behaviour, stating that it was due to peer pressure and he “wouldn’t have done otherwise”. Troy truanted almost daily at school, going off with friends or around to his girlfriend’s house. He again blamed the truanting on peer pressure and being in with the wrong crowd. He left school at age 16. Troy described his childhood as very happy, mentioning the strict discipline in the house, and usually being smacked or scolded and sometimes hit by his parents when he misbehaved. His parents often did not know where he was and what he was doing when he went out. At age 18, Troy attempted suicide because of his feelings of guilt for cheating on his girlfriend numerous times. As an adult, Troy continued to do things against the law, such as taking and selling drugs, damaging property, driving after drinking, receiving money and not paying taxes on it, and driving without a licence. Troy took cannabis daily. He used to take various drugs but stopped taking most of them due to having his daughter around. He claimed that he would take coke again if someone looked after his daughter for the night. Troy committed 9 official offences, of which three were drunk driving offences, and six were violent offences. At age 27, he was imprisoned for a month for drunk driving. He committed his first offence at age 20 and continued to commit crimes until he was 35 so far. His level of psychopathy, measured by the PCL:SV, was 10, with a score of 5 points on the affective/interpersonal factor, and 5 on the irresponsible/antisocial lifestyle. This is a high score. During the interview, Troy was very open in talking about antisocial aspects of his life, such as cheating on his wife and his delinquent lifestyle with regard to his job history. He appeared to be a rather immature and irresponsible man who lived for the present and had no plan for the future.

Child 3 – Convicted

Susan, who had been convicted, was interviewed at age 25. She was living with her female partner, who was 23 years older than herself, in a five-bedroom house that her partner
4.8. Case 104 Jasper (NCC families)

owned. Susan “came out” to her family after her uncle came out, and she mentioned that she realised it from a very young age. Susan was unemployed and seemed to sponge on her partner, who earned a lot of money. She lived a rather unconventional lifestyle for her age; she lived in a very large house, spending her days looking after the house and driving around in her partner’s expensive sports car. During her childhood (under age 12), Susan never truanted, but she was suspended 13 times for fights. Between ages 11 and 15, she often shoplifted small things that she could just put up her sleeves. She left school at age 15 without any qualifications. Susan described her childhood as very happy, mentioning the lenient discipline in the house, and usually being smacked and very occasionally hit by his parents when she misbehaved. Her parents only sometimes knew where she went out. As a young adult, Susan was a drug abuser, taking cannabis daily, ecstasy twice weekly, cocaine every two weeks, and poppers monthly. She often sold drugs, stating that it was not on a big scale, just to people she knew. Susan was aware of her antisocial behaviours, which included theft from work, shoplifting, selling drugs, and receiving money and not declaring it for tax purposes. All these she spoke of and laughed over, finding retelling them as amusing and firmly stating that she had no guilt about any of them. Susan committed one official offence at age 33, which was drunk driving. Her level of psychopathy, measured by the PCL:SV, was 9, with a score of 6 points on the affective/interpersonal factor, and 3 on the irresponsible/antisocial lifestyle. During the interview, Susan was friendly and smiley at times, but other times not. Susan did not come across as being that honest and open. She doubted her brothers would have told the truth when interviewed. The impression Susan gave was of a very confident, relaxed woman who seemed to enjoy herself but lacked ambition and did not really know what she wanted from life. She definitely lived for the moment. Overall, Susan came across as deviant and antisocial in terms of drug use.
Figure 15: The life course of Jasper’s parents (up to Jasper married at age 21) – G1-G2 generation (Case 104-NCC families)

- **Birth of Jasper’s mother (G1F)**
  - 1913
  - Lack of parental support
  - Parental conflict
    - Left school at age 14
    - Large family
    - Remarried at age 28
    - Had two daughters from first marriage
    - Married at age 33
    - Parental harmony
    - Left school at age 14
    - Had a son, John at age 40
    - Had a son, Garry at age 47
    - Married at age 33
    - Left school at age 16
    - Gave birth to John at age 35
    - Gave birth to Michael at age 34
    - Gave birth to William at age 37
    - Gave birth to Garry at age 42
    - Very little or no rules, discipline, guidance
    - Completely permissive
    - Infuriated at times
    - Erratic discipline
    - Overcrowded conditions
    - Lack of parental supervision
    - Associated with antisocial peers
    - Shoplifting at age 16
    - Accused of being drunk and disorderly twice at age 18
    - Married at age 21

- **Birth of Jasper (G2M)**
  - 1908
  - Large family
  - Restless, fearless, careless, easy-going boy
  - Shoplifting at age 16
  - Erratic, unpredictable father
  - Irresponsible, dilatory in family matters
  - Threatening, slapping children
  - Stable job records
  - Frequent job changes
  - Antipolice attitudes
  - Frequent involvement in antisocial activities
  - Had a son, Jasper at age 44
  - Had a son, Garry at age 42
  - Had a son, William at age 37
  - Had a son, Michael at age 39
  - Left school at age 16
  - Associated with antisocial peers
  - Shoplifting at age 16
  - Accused of being drunk and disorderly twice at age 18
  - Married at age 21

- **Birth of Jasper’s father (G1M)**
  - 1913
  - Left school at age 14
  - Large family
  - Married at age 33
  - Shoplifting at age 16
  - Assocated with antisocial peers
  - Shoplifting at age 16
  - Accused of being drunk and disorderly twice at age 18
  - Married at age 21
Figure 16: The life course of Jasper’s children (beginning with Jasper married at age 21) – G2-G3 generation (Case 104-NCC families)

1974
Jasper (G2M)

- Had a son, Boris at age 21
- Very happy childhood

1975
Birth of Jasper’s son, Boris (G3M)

- Had a son, Troy at age 23
- Happy childhood
- Often engaged in risky behaviour
- Lack of parental supervision
- Smacked and sometimes hit by his parents
- Took drugs from age 15
- Attempted suicide
- High on alcohol, drugs

2005
- Lived with a girlfriend but split up at age 28

1976
Birth of Jasper’s son, Troy (G3M)

- Had a daughter, Susan at age 27
- Convicted of obtaining by deception at age 28
- Physical punishment - smacking
- Left school at age 15
- High on antisociality
- Attracted by alcohol
- Attempted suicide at age 18

2012
- Married at age 25
- Violent rows with his wife
- Imprisoned for drunk driving at age 27

1977
- Truanted almost daily
- Strict discipline
- Lack of parental supervision
- Attempted suicide at age 18

2013
- 3 convictions between ages 20 and 27
- High on alcohol, drugs
- 6 convictions between ages 31 and 35

1980
Birth of Jasper’s daughter, Susan (G3F)

- Had a daughter, Susan at age 27
- Convicted of obtaining by deception at age 31
- Dedicated to his family
- Led a stable happy life

2013
- High on drugs
- Started living with a female partner at age 25

1975
Married at age 21

- Had a son, Troy at age 23
- Start of fire fascination at age 11
- Lenient discipline
- Left school at age 15
- Started driving after drinking from age 20

2000
- Sold drugs between ages 19 and 24
- Convicted of obtaining by deception at age 31
- Many convictions
- Started living with a girlfriend but split up at age 28

1975
Birth of Jasper’s son, Boris (G3M)

- Happy childhood
- Fire fascination at age 11
- Lenient discipline
- Left school at age 15
- Started driving after drinking from age 20
- High on alcohol, drugs

1980
Birth of Jasper’s daughter, Susan (G3F)

- Very happy childhood
- Suspended 13 times for fighting
- Smacked by his parents
- Left school at age 15
- Sold drugs between ages 19 and 24
- Convicted of obtaining by deception at age 31
- Dedicated to his family
- Led a stable happy life

2000
- High on drugs
- Started living with a female partner at age 25

1975
Married at age 21

- Had a son, Troy at age 23
- Start of fire fascination at age 11
- Lenient discipline
- Left school at age 15
- Started driving after drinking from age 20
- High on alcohol, drugs

2000
- Sold drugs between ages 19 and 24
- Convicted of obtaining by deception at age 31
- Many convictions
- Started living with a girlfriend but split up at age 28

1975
Birth of Jasper’s son, Boris (G3M)

- Happy childhood
- Fire fascination at age 11
- Lenient discipline
- Left school at age 15
- Started driving after drinking from age 20
- High on alcohol, drugs

2000
- Sold drugs between ages 19 and 24
- Convicted of obtaining by deception at age 31
- Many convictions
- Started living with a girlfriend but split up at age 28

1975
Married at age 21

- Had a son, Troy at age 23
- Start of fire fascination at age 11
- Lenient discipline
- Left school at age 15
- Started driving after drinking from age 20
- High on alcohol, drugs

2000
- Sold drugs between ages 19 and 24
- Convicted of obtaining by deception at age 31
- Many convictions
- Started living with a girlfriend but split up at age 28

1975
Birth of Jasper’s son, Boris (G3M)

- Happy childhood
- Fire fascination at age 11
- Lenient discipline
- Left school at age 15
- Started driving after drinking from age 20
- High on alcohol, drugs

2000
- Sold drugs between ages 19 and 24
- Convicted of obtaining by deception at age 31
- Many convictions
- Started living with a girlfriend but split up at age 28

1975
Married at age 21

- Had a son, Troy at age 23
- Start of fire fascination at age 11
- Lenient discipline
- Left school at age 15
- Started driving after drinking from age 20
- High on alcohol, drugs

2000
- Sold drugs between ages 19 and 24
- Convicted of obtaining by deception at age 31
- Many convictions
- Started living with a girlfriend but split up at age 28
4.9 A summary of the case histories of eight CSDD men and their family members

Although I have only been able to explore the intergenerational transmission of criminal behaviour with a few case studies, it seems apparent that some of the key underlying mechanisms operated within the context of family in the following ways:

- Convicted parents tended to be frequently in conflict with and violent towards their partner, to have low incomes, to use physical punishment, to poorly monitor and supervise their children, and to have no interest in education, and this seemed to increase the likelihood of their children’s conviction. These findings suggest that the intergenerational transmission of criminal behaviour may be due, in part, to the results of criminal parents exposing their children to risk factors for criminal behaviour. The case studies illustrated that the most important risk factors were largely found in the family context, such as parental conflict, parental separation, low family income, poor parental supervision, and low parental involvement in education, all of which seemed to serve as mediators between parental and child convictions. Other risk factors, such as a large family, nervous mother/father, uninvolved father, and authoritative parental attitudes, appeared to mediate the transmission of criminal behaviour across generations. Therefore, the case studies provide some support for the mechanism of mediating risk factors; the idea that the intergenerational transmission of criminal behaviour is mediated by risk factors for criminal behaviour, as discussed by Farrington (2002, 2011).

- Convicted parents and their children seemed to be exposed to the same cluster of risk factors, such as poverty, poor housing, disrupted family, parental conflict, and poor parental supervision, and these factors seemed to increase the risk that both parents and children were convicted of crime. For example, the case studies showed that children of convicted parents who experienced parental divorce or conflict during childhood tended to be divorced or in conflict with their partner in later life. The results suggest that the intergenerational transmission of conviction may occur through the transmission of risk factors for criminal behaviour and support the idea that exposure to multiple risk factors leads to the intergenerational transmission of criminal behaviour (Farrington, 2002, 2011).

- Convicted parents who used inadequate parenting practices, such as poor parental monitoring and supervision, erratic/harsh discipline, neglect, and physical punishment tended to produce children who use similar parenting practices when they grew up, and
this seemed to increase the risk of the children repeating their criminal behaviour. For example, Simon (case 020) and Derek (case 781) from the category of CCC repeated the neglectful parenting styles they experienced while growing up, which in turn contributed to negative outcomes among their children, including criminal behaviour. In agreement with the findings of previous studies (e.g., Conger et al., 2003; Hops et al., 2003; Capaldi et al., 2003; Smith & Farrington, 2004), these findings suggest that the continuity in parenting practices may contribute to the familial resemblance in criminal behaviour.

Interestingly, one of the convicted parents (case 781) seemed to influence his children’s criminal behaviour through genetic mechanisms, because his children had virtually no contact with him since they were very young, but they seemed to have certain antisocial traits that were very similar to those of him. It was also difficult to see their deviant characteristics as coming from their mother; she was a woman who appeared to live a conventional life. In agreement with genetic mechanisms (Farrington, 2002; 2011), the finding showed some evidence that continuity in criminal behaviour may be attributable to genetic influences.
Chapter 5
A statistical investigation of intergenerational transmission of criminal behaviour across three generations from the Cambridge Study in Delinquent Development (CSDD)

5.1. Do G1 (generation 1) convictions predict G2 (generation 2) convictions (G1-G2)?

There were 411 males in the CSDD. However, two G2 males emigrated before age 10, and another five G2 males emigrated up to age 21. They were not searched and so were not at risk of being convicted in England and Wales. This left 404 families with a G1 father, G1 mother, and G2 son who were all searched and at risk of conviction. In this analysis, convictions of G2 sons up to their age 32 were compared with convictions of G1 parents up to the same age. Using such a comparable measure follows Thornberry’s (2009:300) design criteria stating that “intergenerational studies should have comparable measures of G2 and G3 antisocial behaviour that cover the same ages or the same developmental stages”.

G1-G2 male families

Table 5.1.1 shows the prevalence of convictions up to age 32 for all G1 fathers, G1 mothers, and G2 sons; 20.0% of G1 fathers and 7.4% of G1 mothers were convicted, compared with 39.9% of G2 sons.

<table>
<thead>
<tr>
<th>Number searched</th>
<th>Number convicted (%)</th>
<th>Number unconvicted (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1 father</td>
<td>404</td>
<td>81 (20.0%)</td>
</tr>
<tr>
<td>G1 mother</td>
<td>404</td>
<td>30 (7.4%)</td>
</tr>
<tr>
<td>G2 son</td>
<td>404</td>
<td>161 (39.9%)</td>
</tr>
</tbody>
</table>

Table 5.1.1 Prevalence of convictions up to age 32 for all G1 fathers, G1 mothers, and G2 son

NB The G2 are not all different people
G1 male-G2 male (G1M-G2M)

Table 5.1.2 shows the percentage of G2 males convicted up to age 32, given convicted or unconvicted G1 males up to age 32. For example, 69.1% of G2 males with a convicted G1 male were themselves convicted, compared with 32.5% of G2 males with an unconvicted G1 male (OR=4.651, CI=2.749-7.868). Convictions of G1 fathers up to age 32 were significantly predictive of convictions of G2 sons up to age 32 (p<.001).

<table>
<thead>
<tr>
<th></th>
<th>% Convicted</th>
<th>% Unconvicted</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1 male convicted</td>
<td>56 (69.1%)</td>
<td>25 (30.9%)</td>
<td>81 (20.0%)</td>
<td>4.651</td>
<td>2.749-7.868</td>
</tr>
<tr>
<td>G1 male unconvicted</td>
<td>105 (32.5%)</td>
<td>218 (67.5%)</td>
<td>323 (80.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>161 (39.9%)</td>
<td>243 (60.1%)</td>
<td>404 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.1.1. G1 female-G2 male (G1F-G2M)

Table 5.1.3 shows the percentage of G2 males up to age 32, given convicted or unconvicted G1 females up to age 32. For example, 66.7% of G2 males with a convicted G1 female were themselves convicted, compared with 37.7% of G2 males with an unconvicted G1 female (OR=3.305, CI=1.504-7.263). Convictions of G1 mothers up to age 32 were significantly predictive of convictions of G2 sons up to age 32 (p=.003).

<table>
<thead>
<tr>
<th></th>
<th>% Convicted</th>
<th>% Unconvicted</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1 female convicted</td>
<td>20 (66.7%)</td>
<td>10 (33.3%)</td>
<td>30 (7.4%)</td>
<td>3.305</td>
<td>1.504-7.263</td>
</tr>
<tr>
<td>G1 female unconvicted</td>
<td>141 (37.7%)</td>
<td>233 (62.3%)</td>
<td>374 (92.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>161 (39.9%)</td>
<td>243 (60.1%)</td>
<td>404 (100%)</td>
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</table>

OR odds ratio, CI 95% confidence interval
In the G1-G2M analyses, the greater strength of the same-sex intergenerational relationship was clear. The G1 father-G2 son relationship was stronger than the G1 mother-G2 son relationship. The OR was 4.651 for G1 fathers versus G2 sons and 3.305 for G1 mothers versus G2 sons.

5.2. Does the G1-G2 relationship vary according to whether or not G2 was separated from G1?

I then investigated whether the G1-G2 relationship varied if the G2 was separated (temporarily or permanently) from a G1 parent (mainly from the father) before age 10. Of the 404 G2 males, 90 (22.3%) were separated from their parent before age 10, but 314 (77.7%) were not.

5.2.1. G1 male-G2 male (G1M-G2M)

Table 5.2.1 shows the percentage of G2 males convicted up to age 32, given convicted or unconvicted G1 males up to age 32, and separated or unseparated G2 males from a G1 parent before age 10. Of G2 males who were separated, 72.2% of 36 with a convicted G1 male were themselves convicted, compared with 51.9% of 54 with an unconvicted G1 male (OR=2.414, CI=0.978-5.961). Of G2 males who were not separated, 66.7% of 45 with a convicted G1 male were themselves convicted, compared with 28.6% of 269 with an unconvicted G1 male (OR=4.987, CI=2.542-9.783). Convictions of G1 fathers significantly predicted convictions of G2 sons for those who were not separated (p<.001) and marginally predicted convictions of G2 sons for those who were separated (p=.056). The relationship between convicted G1 fathers and convicted G2 sons was clearly stronger for G2 sons who had not been separated from their parent before age 10. Therefore, there may be both environmental and genetic effects.
Table 5.2.1
Percentage of G2 males convicted, given convicted or unconvicted G1 males, and separated or unseparated G2 males from a G1 parent before age 10 (G1M-G2M)

<table>
<thead>
<tr>
<th></th>
<th>% Convicted G2 male</th>
<th>% Unconvicted G2 male</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1 male convicted</td>
<td>26 (72.2%)</td>
<td>10 (27.8%)</td>
<td>36 (40.0%)</td>
<td>2.414</td>
<td>0.978-5.961</td>
</tr>
<tr>
<td>G1 male unconvicted</td>
<td>28 (51.9%)</td>
<td>26 (48.1%)</td>
<td>54 (60.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>54 (60.0%)</td>
<td>36 (40.0%)</td>
<td>90 (22.3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1 male convicted</td>
<td>30 (66.7%)</td>
<td>15 (33.3%)</td>
<td>45 (14.3%)</td>
<td>4.987</td>
<td>2.542-9.783</td>
</tr>
<tr>
<td>G1 male unconvicted</td>
<td>77 (28.6%)</td>
<td>192 (71.4%)</td>
<td>269 (85.7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>107 (34.1%)</td>
<td>207 (65.9%)</td>
<td>314 (77.7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>161 (39.9%)</td>
<td>243 (60.1%)</td>
<td>404 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OR odds ratio, CI 95% confidence interval

5.2.2. G1 female-G2 male (G1F-G2M)

Table 5.2.2 shows the percentage of G2 males up to age 32, given convicted or unconvicted G1 females up to age 32, and separated or unseparated G2 males from a G1 parent before age 10. Of G2 males who were separated, 58.3% of 12 with a convicted G1 female were themselves convicted, compared with 60.3% of 78 with an unconvicted G1 female (OR=0.923, CI=0.269-3.172). Of G2 males who were not separated, 72.7% of 18 with a convicted G1 female were themselves convicted, compared with 31.8% of 296 with an unconvicted G1 female (OR=5.587, CI=1.936-16.127). Convictions of G1 mothers significantly predicted convictions of G2 sons for those who were not separated (p=.001), but convictions of G1 mothers were not significantly predictive of convictions of G2 sons for those who were separated (p=.899). The relationship was only significant when the G2 males were not separated. Therefore, there may be mainly environmental rather than genetic.
Table 5.2.2
Percentage of G2 males convicted, given convicted or unconvicted G1 females, and separated or unseparated G2 males from a G1 parent before age 10 (G1F-G2M)

<table>
<thead>
<tr>
<th></th>
<th>% Convicted G2 male</th>
<th>% Unconvicted G2 male</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Separated</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1 female convicted</td>
<td>7 (58.3%)</td>
<td>5 (41.7%)</td>
<td>12</td>
<td>0.923</td>
<td>0.269-3.172</td>
</tr>
<tr>
<td>G1 female unconvicted</td>
<td>47 (60.3%)</td>
<td>31 (39.7%)</td>
<td>78</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>54 (60.0%)</td>
<td>36 (40.0%)</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Not separated</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1 female convicted</td>
<td>13 (72.2%)</td>
<td>5 (27.8%)</td>
<td>18</td>
<td>5.587</td>
<td>1.936-16.127</td>
</tr>
<tr>
<td>G1 female unconvicted</td>
<td>94 (31.8%)</td>
<td>202 (68.2%)</td>
<td>296</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>107 (34.1%)</td>
<td>207 (65.9%)</td>
<td>314</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>161 (39.9%)</td>
<td>243 (60.1%)</td>
<td>404</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OR odds ratio, CI 95% confidence interval

5.2.3. Is the effect of G1 parental convictions on G2 child convictions moderated by separation from a parent?

Based on the work of Baron and Kenny (1986), there are three possible paths to the outcome under investigation, which for these analyses is convictions of G2 males up to age 32: (1) the proposed predictor; (2) the proposed moderator; and (3) the product of the predictor path and the moderator path. While there may also be significant main effects for both the predictor and moderator (Baron & Kenny, 1986:1174), if the path (3) is significant, then it suggests a moderator effect. I can test this moderator effect using Analysis of Variance (ANOVA), which tests the differential effect of the predictor variable on the outcome variable as a function of the moderator. I examined temporary or permanent separation from a G1 parent before the G2 boy’s tenth birthday for reasons other than death or hospitalization as a possible moderating effect of convictions of G1 up to age 32 on convictions of G2 males up to age 32.

Table 5.2.3 shows that there was a significant interaction effect: convicted G1F*SEP from G1 (p=.023). Therefore, the effect of convicted G1 females on convicted G2 males was
moderated by having been separated from a G1 parent before the G2 boy’s tenth birthday or not.

The right half of the table shows the percentage of convicted G2 males in each of the following four categories: (1) unconvicted G1M/G1F, no separation from G1, (2) unconvicted G1M/G1F, separation from G1, (3) convicted G1M/G1F, no separation from G1, and (4) convicted G1M/G1F, separation from G1. For the G1 male-G2 male relationship (G1M-G2M), the percentage of convicted G2 males in each of the 4 categories was 28.6%, 51.9%, 66.7%, and 72.2%, respectively, with the fourth category of ‘convicted G1M, separation from G1’ having the largest percentage of convicted G2 males. It seems that a convicted G1 male and separation both act as risk factors and that the two risk factors of a convicted G1 male and separation are having additive effects. Clearly, it is the combination of risk factors that is important. For the G1 female-G2 male relationship (G1F-G2M), there was a significant interaction effect between a convicted G1 female and separation, and the percentage of convicted G2 males in each of the 4 categories was 31.8%, 60.3%, 72.2%, and 58.3%, respectively. The findings suggest that a similar number of G2 males were convicted if they had been separated from a G1 parent whether they had a convicted G2 female or not (60.3% versus 58.3%). The relationship between convicted G1 mothers and convicted G2 males was clearly stronger for G2 males who had not been separated from a G1 parent. Since a convicted G1 mother did not predict a convicted G2 male for those who were separated, it may be that the influence of the G1 mother is mainly environmental rather than genetic. Perhaps being separated from a G1 parent before age 10 acts as a protective factor against the risk factor of a convicted G1 mother.
### Table 5.2.3

Separation from a parent as a possible moderator of convictions of G1 males and G1 females versus convictions of G2 males (G1-G2)

<table>
<thead>
<tr>
<th>Interaction</th>
<th>F</th>
<th>p</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convicted G1M</td>
<td>22.056</td>
<td>.000</td>
<td>Unconvicted G1M/No SEP from G1</td>
</tr>
<tr>
<td>SEP from G1</td>
<td>5.355</td>
<td>.021</td>
<td>Unconvicted G1M/SEP from G1</td>
</tr>
<tr>
<td>Convicted G1M*SEP from G1</td>
<td>2.019</td>
<td>.156</td>
<td>Convicted G1M/No SEP from G1</td>
</tr>
<tr>
<td>G1 Convicted G1M/SEP from G1</td>
<td></td>
<td></td>
<td>Convicted G1M/SEP from G1</td>
</tr>
</tbody>
</table>

| Convicted G1F | 4.288  | .039 | Unconvicted G1F/No SEP from G1 | 31.8 |
| SEP from G1 | .616   | .433 | Unconvicted G1F/SEP from G1 | 60.3 |
| Convicted G1F*SEP from G1 | 5.186  | .023* | Convicted G1F/No SEP from G1 | 72.2 |
| G1 Convicted G1F/SEP from G1 |          |      | Convicted G1F/SEP from G1 | 58.3 |

*p<.05; Convicted G1M = Convicted G1 male; Convicted G1F = Convicted G1 female; SEP from G1 = A G2 boy had been temporarily or permanently separated from a G1 parent before his tenth birthday; No SEP from G1 = A G2 boy had lived with his G1 parents for the whole time period up to his tenth birthday.

---

**Fig. 5.1** Percentages of convicted G2 males versus SEP from G1
5.3. Do G2 (generation 2) convictions predict G3 (generation 3) convictions (G2-G3)?

There were 691 G3 children whose names and dates of birth were known. However, the 31 G3 children who had been abroad since birth could not be searched, and the other five G3 children were not searched due to insufficient identifying particulars. Therefore, 655 G3 children were searched. These included 342 G3 males and 313 G3 females. This left (1) 342 families with a G2 father, a G2 mother and a G3 son who were all searched and at risk of conviction, and (2) 313 families with a G2 father, a G2 mother and a G3 daughter who were all searched and at risk of conviction. In this analysis, the convictions of the G3 children up to their age 32 were compared with the convictions of the G2 parents up to the same age.

G2-G3 male families

Table 5.3.1 shows the prevalence of convictions up to age 32 for all G2 fathers, G2 mothers, and G3 sons; 40.6% of G2 fathers and 9.1% of G2 mothers were convicted, compared with 27.2% of G3 sons.

<table>
<thead>
<tr>
<th></th>
<th>G2 father</th>
<th>G2 mother</th>
<th>G3 son</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number searched</td>
<td>342</td>
<td>342</td>
<td>342</td>
</tr>
<tr>
<td>Number convicted (%)</td>
<td>139 (40.6%)</td>
<td>31 (9.1%)</td>
<td>93 (27.2%)</td>
</tr>
<tr>
<td>Number unconvicted (%)</td>
<td>203 (59.4%)</td>
<td>311 (90.9%)</td>
<td>249 (72.8%)</td>
</tr>
<tr>
<td>NB The G2 are not all different people</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3.1. G2 male-G3 male (G2M-G3M)

Table 5.3.2 shows the percentage of G3 males convicted up to age 32, given convicted or unconvicted G2 males up to age 32. For example, 39.6% of G3 males with a convicted G2 male were themselves convicted, compared with 18.7% of G3 males with an unconvicted G2 male (OR=2.843, CI=1.742-4.640). Convictions of G2 fathers up to age 32 were significantly predictive of convictions of G3 sons up to age 32 (p<.001).
Table 5.3.2

<table>
<thead>
<tr>
<th></th>
<th>% Convicted G3 male</th>
<th>% Unconvicted G3 male</th>
<th>Total (G3 male)</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>G2 male convicted</td>
<td>55 (39.6%)</td>
<td>84 (60.4%)</td>
<td>139 (40.6%)</td>
<td>2.843</td>
<td>1.742-4.640</td>
</tr>
<tr>
<td>G2 male unconvicted</td>
<td>38 (18.7%)</td>
<td>165 (81.3%)</td>
<td>203 (59.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93 (27.2%)</td>
<td>249 (72.8%)</td>
<td>342 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*OR* odds ratio, *CI* 95% confidence interval

### 5.3.2. G2 female-G3 male (G2F-G3M)

Table 5.3.3 shows the percentage of G3 males convicted up to age 32, given convicted or unconvicted G2 females up to age 32. For example, 64.5% of G3 males with a convicted G2 female were themselves convicted, compared with 23.5% of G3 males with an unconvicted G2 female (OR=5.928, CI=2.714-12.945). Convictions of G2 mothers up to age 32 were significantly predictive of convictions of G3 sons up to age 32 (p<.001).

Table 5.3.3

<table>
<thead>
<tr>
<th></th>
<th>% Convicted G3 male</th>
<th>% Unconvicted G3 male</th>
<th>Total (G3 male)</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>G2 female convicted</td>
<td>20 (64.5%)</td>
<td>11 (35.5%)</td>
<td>31 (9.1%)</td>
<td>5.928</td>
<td>2.714-12.945</td>
</tr>
<tr>
<td>G2 female unconvicted</td>
<td>73 (23.5%)</td>
<td>238 (76.5%)</td>
<td>311 (90.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93 (27.2%)</td>
<td>249 (72.8%)</td>
<td>342 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*OR* odds ratio, *CI* 95% confidence interval

For G2 parents versus G3 sons, convictions of G2 parents significantly predicted convictions of G3 sons. The G2 mother-G3 son relationship was stronger than the G2 father-G3 son relationship. The OR was 2.843 for G2 fathers versus G3 sons and 5.928 for G2 mothers versus G3 sons. However, with a small sample size of convicted G2 females, caution must be applied.
**G2-G3 female families**

Table 5.3.4 shows the prevalence of convictions up to age 32 for all G2 fathers, G2 mothers, and G3 daughters; 52.4% of G2 fathers and 11.8% of G2 mothers were convicted, compared with 8.6% of G3 daughters.

<table>
<thead>
<tr>
<th></th>
<th>G2 father</th>
<th>G2 mother</th>
<th>G3 daughter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number searched</td>
<td>313</td>
<td>313</td>
<td>313</td>
</tr>
<tr>
<td>Number convicted (%)</td>
<td>149 (47.6%)</td>
<td>37 (11.8%)</td>
<td>27 (8.6%)</td>
</tr>
<tr>
<td>Number unconvicted (%)</td>
<td>164 (52.4%)</td>
<td>276 (88.2%)</td>
<td>286 (91.4%)</td>
</tr>
</tbody>
</table>

NB The G2 are not all different people

**5.3.3. G2 male-G3 female (G2M-G3F)**

Table 5.3.5 shows the percentage of G3 females convicted up to age 32, given convicted or unconvicted G2 males up to age 32. For example, 11.4% of G3 females with a convicted G2 male were themselves convicted, compared with 6.1% of G3 females with an unconvicted G2 male (OR=1.983, CI=0.878-4.481). Convictions of G2 fathers up to age 32 did not significantly predict convictions of G3 daughters up to age 32 (p=.100).

<table>
<thead>
<tr>
<th></th>
<th>% Convicted</th>
<th>% Unconvicted</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>G2 male convicted</td>
<td>17 (11.4%)</td>
<td>132 (88.6%)</td>
<td>149 (47.6%)</td>
<td>1.983</td>
<td>0.878-4.481</td>
</tr>
<tr>
<td>G2 male unconvicted</td>
<td>10 (6.1%)</td>
<td>154 (93.9%)</td>
<td>164 (52.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27 (8.6%)</td>
<td>286 (91.4%)</td>
<td>313 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OR** odds ratio, **CI** 95% confidence interval

**5.3.4. G2 female-G3 female (G2F-G3F)**

Table 5.3.6 shows the percentage of G3 females convicted up to age 32, given convicted or unconvicted G2 females up to age 32. For example, 18.9% of G3 females with a convicted G2 female were themselves convicted, compared with 7.2% of G3 females with an
unconvicted G2 female (OR=2.987, CI=1.166-7.647). Convictions of G2 mothers up to age 32 were significantly predictive of convictions of G3 daughters (p=.023).

| Table 5.3.6 |
|-----------------|-----------------|-----------------|--------|--------|
|                  | % Convicted     | % Unconvicted   | Total  | OR     | CI     |
| G3 female        |                 |                 |        |        |        |
| G2 female convicted | 7 (18.9%) | 30 (81.1%) | 37 (11.8%) | 2.987 | 1.166-7.647 |
| G2 female unconvicted | 20 (7.2%) | 256 (92.8%) | 276 (88.2%) |        |        |
| Total            | 27 (8.6%)       | 286 (91.4%)     | 313 (100%) |        |        |

**Overall,** in the G2-G3 analyses, convictions of G2 fathers significantly predicted convictions of G3 sons, as did convictions of G2 mothers. The G2 mother-G3 son relationship was stronger than the G2 father-G3 son relationship. Convictions of G2 mothers up to age 32 significantly predicted convictions of G3 daughters up to age 32, but convictions of G2 fathers were not significantly predictive. Perhaps surprisingly, the strongest relationship between G2 parents and G3 children was between G2 mothers and G3 sons (OR=5.928, CI=2.714-12.945). The OR was 2.987 for G2 mothers versus G3 daughters, 2.843 for G2 fathers versus G3 sons, and 1.983 for G2 fathers versus G3 daughters.

In the G1-G2 analyses, same-sex intergenerational relationships were stronger than opposite-sex relationships. However, in the G2-G3 analyses, the greater strength of same-sex intergenerational relationships was less clear. While the G2 mother-G3 daughter relationship was stronger than the G2 father-G3 daughter, the G2 mother-G3 son relationship was stronger than the G2 father-G3 son relationship. It is noteworthy that the effects of G2 mothers were stronger than that of G2 fathers.

5.4. **Does the G2-G3 relationship vary according to whether or not G3 was separated from G2?**

I then investigated whether the G2-G3 relationship varied if the G3 was separated from a G2 father before age 15. There were 551 G3 who were interviewed, with 291 G3 males
and 260 G3 females. The G3, in their interviews, reported whether they lived with their G2 father for the whole time period up to their 16\textsuperscript{th} birthday or whether they had been separated from their G2 father. No information was collected about separations from their G2 mother. I had the data available both for G3 males and G3 females. However, five G3 males and three G3 females were excluded in the analysis because their information about separation from G2 father was not known. Therefore, 543 G3 were included, with 286 G3 males and 257 G3 females.

Table 5.4.1 shows the percentage of separation from a G2 father before age 15 for all G3 males and G3 females. Of the 286 G3 males, 208 (72.7\%) were not separated from the father before age 15, but 78 (27.2\%) were. Of the 257 G3 females, 165 (64.2\%) were not separated from the father before age 15, but 92 (35.8\%) were.

<table>
<thead>
<tr>
<th>Table 5.4.1</th>
<th>Percentage of separation from a G2 father before age 15 for all G3 sons and G3 daughters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G3 son</td>
</tr>
<tr>
<td>Number searched</td>
<td>286</td>
</tr>
<tr>
<td>Number separated (%)</td>
<td>78 (27.3%)</td>
</tr>
<tr>
<td>Number unseparated (%)</td>
<td>208 (72.7%)</td>
</tr>
</tbody>
</table>

**G2-G3 male families**

Table 5.4.2 shows the prevalence of convictions up to age 32 for all G2 fathers, G2 mothers, and G3 sons; 37.1\% of G2 fathers and 6.6\% of G2 mothers were convicted, compared with 25.2\% of G3 sons.

<table>
<thead>
<tr>
<th>Table 5.4.2</th>
<th>Prevalence of convictions up to age 32 for all G2 fathers, G2 mothers, and G3 sons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G2 father</td>
</tr>
<tr>
<td>Number searched</td>
<td>286</td>
</tr>
<tr>
<td>Number convicted (%)</td>
<td>106 (37.1%)</td>
</tr>
<tr>
<td>Number unconvicted (%)</td>
<td>180 (62.9%)</td>
</tr>
</tbody>
</table>

NB The G2 are not all different people
5.4.1. G2 male-G3 male (G2M-G3M)

I did this analysis with 286 G2 male-G3 male pairs. Table 5.4.3 shows the percentage of G3 males convicted up to age 32, given convicted or unconvicted G2 males up to age 32, and separated or unseparated G3 males from their G2 father before age 15. Of G3 males who were separated, 43.2% of 37 with a convicted G2 male were themselves convicted, compared with 22.0% of 41 with an unconvicted G2 male (OR=2.709, CI=1.012-7.253). Of G3 males who were not separated, 34.8% of 69 with a convicted G2 male were themselves convicted, compared with 16.5% of 139 with an unconvicted G2 male (OR=2.690, CI=1.380-5.244). Convictions of G2 fathers significantly predicted convictions of G3 sons for both separated G3 sons (p=.044) and unseparated G3 sons (p=.003). The strength of the relationship between convicted G2 fathers and convicted G3 sons was similar between separated G3 sons and unseparated G3 sons. Therefore, both genetic and environmental influences may contribute to the relationship between convicted G2 males and convicted G3 males, with genetic effects playing an important role.

Table 5.4.3
Percentage of G3 males convicted, given convicted or unconvicted G2 males, and separated or unseparated G3 males from a G2 father before age 15 (G2M-G3M)

<table>
<thead>
<tr>
<th></th>
<th>% Convicted G3 male</th>
<th>% Unconvicted G3 male</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2 male convicted</td>
<td>16 (43.2%)</td>
<td>21 (56.8%)</td>
<td>37 (47.4%)</td>
<td>2.709</td>
<td>1.012-7.253</td>
</tr>
<tr>
<td>G2 male unconvicted</td>
<td>9 (22.0%)</td>
<td>32 (78.0%)</td>
<td>41 (52.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 (32.1%)</td>
<td>53 (67.9%)</td>
<td>78 (27.3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2 male convicted</td>
<td>24 (34.8%)</td>
<td>45 (65.2%)</td>
<td>69 (33.2%)</td>
<td>2.690</td>
<td>1.380-5.244</td>
</tr>
<tr>
<td>G2 male unconvicted</td>
<td>23 (16.5%)</td>
<td>116 (83.5%)</td>
<td>139 (66.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>47 (22.6%)</td>
<td>161 (77.4%)</td>
<td>208 (72.7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72 (25.2%)</td>
<td>214 (74.8%)</td>
<td>286 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*OR* odds ratio, *CI* 95% confidence interval
5.4.2. G2 female-G3 male (G2F-G3M)

I did this analysis with 286 G2 female-G3 male pairs. Table 5.4.4 shows the percentage of G3 males convicted up to age 32, given convicted or unconvicted G2 females up to age 32, and separated or unseparated G3 males from a G2 father before age 15. Of G3 males who were separated, 83.3% of 6 with a convicted G2 mother were themselves convicted, compared with 27.8% of 72 with an unconvicted G2 mother (OR=13.000, CI=1.429-118.279). Of G3 males who were not separated, 61.5% of 13 with a convicted G2 mother were themselves convicted, compared with 20.0% of 195 with an unconvicted G2 mother (OR=6.400, CI=1.984-20.645). Convictions of G2 mothers significantly predicted convictions of G3 sons for both separated G3 sons (p=.023) and unseparated G3 sons (p=.002). The relationship between convicted G2 mothers and convicted G3 sons was clearly stronger for G3 sons who had been separated from their father before age 25. Therefore, there may be mainly genetic effects. However, with a small sample size of convicted G2 females, caution must be applied.

<table>
<thead>
<tr>
<th>Table 5.4.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of G3 males convicted, given convicted or unconvicted G2 females, and separated or unseparated G3 males from a G2 father before age 15 (G2F-G3M)</td>
</tr>
<tr>
<td>% Convicted</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>G3 male</td>
</tr>
<tr>
<td>Separated G2 female convicted</td>
</tr>
<tr>
<td>G2 female unconvicted</td>
</tr>
<tr>
<td>25 (32.1%)</td>
</tr>
<tr>
<td>Not separated G2 female convicted</td>
</tr>
<tr>
<td>G2 female unconvicted</td>
</tr>
<tr>
<td>47 (22.6%)</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

OR odds ratio, CI 95% confidence interval
**G2-G3 female families**

Table 5.4.5 shows the prevalence of convictions up to age 32 for 257 G2 father-G3 daughter pairs and 252 G2 mother-G3 daughter pairs; 44.0% of G2 fathers were convicted, compared with 8.6% of G3 daughters, and 9.9% of G2 mothers were convicted, compared with 8.3% of G3 daughters.

<table>
<thead>
<tr>
<th>Table 5.4.5</th>
<th>Prevalence of convictions up to age 32 for all G2 fathers, G2 mothers, and G3 daughter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number searched</td>
<td>G2 father</td>
</tr>
<tr>
<td>Number convicted (%)</td>
<td>113 (44.0%)</td>
</tr>
<tr>
<td>Number unconvicted (%)</td>
<td>144 (56.0%)</td>
</tr>
</tbody>
</table>

NB The G2 are not all different people

**5.4.3. G2 male-G3 female (G2M-G3F)**

I did this analysis with 257 G2 male-G3 female pairs. Table 5.4.6 shows the percentage of G3 females convicted up to age 32, given convicted or unconvicted G2 males up to age 32, and separated or unseparated G3 females from their father before age 15. Of G3 females who were separated, 14.5% of 55 with a convicted G2 male were themselves convicted, compared with 8.1% of 37 with an unconvicted G2 male (OR=1.929, CI=0.476-7.810). Of G3 females who were not separated, 6.9% of 58 with a convicted G2 male were themselves convicted, compared with 6.5% of 107 with an unconvicted G2 male (OR=1.058, CI=0.296-3.777). The relationship was only significant when the G3 daughter was separated. Therefore, the influences of the G2 fathers may be mainly genetic effects. However, with a small sample size of convicted G2 females, caution must be applied.
Table 5.4.6
Percentage of G3 females convicted, given convicted or unconvicted G2 males, and separated or unseparated G3 females from a G2 father before age 15 (G2M-G3F)

<table>
<thead>
<tr>
<th></th>
<th>% Convicted</th>
<th>% Unconvicted</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G3 female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G3 female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2 male convicted</td>
<td>8 (14.5%)</td>
<td>47 (85.5%)</td>
<td>55 (59.8%)</td>
<td>1.929</td>
<td>0.476-7.810</td>
</tr>
<tr>
<td>G2 male unconvicted</td>
<td>3 (8.1%)</td>
<td>34 (91.9%)</td>
<td>37 (40.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11 (12.0%)</td>
<td>81 (88.0%)</td>
<td>92 (35.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2 male convicted</td>
<td>4 (6.9%)</td>
<td>54 (93.1%)</td>
<td>58 (35.2%)</td>
<td>1.058</td>
<td>0.296-3.777</td>
</tr>
<tr>
<td>G2 male unconvicted</td>
<td>7 (6.5%)</td>
<td>100 (93.5%)</td>
<td>107 (64.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11 (6.7%)</td>
<td>154 (93.3%)</td>
<td>165 (64.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22 (8.6%)</td>
<td>235 (91.4%)</td>
<td>257 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OR odds ratio, CI 95% confidence interval

5.4.4. G2 female-G3 female (G2F-G3F)

I did this analysis with 252 G2 female-G3 female pairs because five G2 females were not searched. Table 5.4.7 shows the percentage of G3 females convicted up to age 32, given convicted or unconvicted G2 females up to age 32, and separated or unseparated G3 females from their G2 father before age 15. Of G3 females who were separated, 18.2% of 11 with a convicted G2 female were themselves convicted, compared with 10.4% of 77 with an unconvicted G2 female (OR=1.917, CI=0.351-10.471). Of G3 females who were not separated, 21.4% of 14 with a convicted G2 female were themselves convicted, compared with 5.3% of 150 with an unconvicted G2 female (OR=4.841, CI=1.122-20.883). Convictions of G2 mothers significantly predicted convictions of G3 daughters for those who were not separated (p=.034), but convictions of G2 mothers were not significantly predictive of convictions of G3 daughters for those who were separated (p=.453). The relationship was only significant when the G3 daughter was not separated. Therefore, there may be mainly environmental rather than genetic. However, with a small sample size of convicted G2 mothers, caution must be applied.
### Table 5.4.7

Percentage of G3 females convicted, given convicted or unconvicted G2 females, and separated or unseparated G3 females from a G2 father before age 15 (G2F-G3F)

<table>
<thead>
<tr>
<th></th>
<th>% Convicted G3 female</th>
<th>% Unconvicted G3 female</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2 female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>convicted</td>
<td>2 (18.2%)</td>
<td>9 (81.8%)</td>
<td>11 (12.5%)</td>
<td>1.917</td>
<td>0.351-10.471</td>
</tr>
<tr>
<td>unconvicted</td>
<td>8 (10.4%)</td>
<td>69 (89.6%)</td>
<td>77 (87.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 (11.4%)</td>
<td>78 (88.6%)</td>
<td>88 (34.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2 female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>convicted</td>
<td>3 (21.4%)</td>
<td>11 (78.6%)</td>
<td>14 (8.5%)</td>
<td>4.841</td>
<td>1.122-20.883</td>
</tr>
<tr>
<td>unconvicted</td>
<td>8 (5.3%)</td>
<td>142 (94.7%)</td>
<td>150 (91.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11 (6.7%)</td>
<td>153 (93.3%)</td>
<td>164 (65.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>21 (8.3%)</td>
<td>231 (91.7%)</td>
<td>252 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*OR* odds ratio, *CI* 95% confidence interval

Overall, the relationships between convicted G2 fathers and convicted G3 sons and between convicted G2 mothers and convicted G3 sons were stronger for G3 sons who had been separated. Therefore, it seems that the influence of the G2 parents (either a G2 father or a G2 mother) on convictions of G3 sons may be mainly genetic. On the other hand, the relationship between convicted G2 mothers and convicted G3 daughters was only significant for the G3 daughters who was not separated. Therefore, the influence of the G2 mothers on convictions of G3 daughters may be mainly environmental.
5.4.5. Is the effect of G2 parental convictions on G3 children convictions moderated by separation from a parent?

I examined separation from a G2 father before age 15 as a possible moderating effect of convictions of G2 parents up to age 32 on convictions of G3 children up to age 32.

G2-G3 male families

Table 5.4.8 shows that the interactions between convicted G2M*SEP from G2 (p=.790) and between convicted G2F*SEP from G2 (p=.512) were not significant. Thus, the effect of convicted G2 parents on convicted G3 males was not moderated by having been separated from a G2 father before age 15.

The right half of the table shows the percentage of convicted G3 males in each of the following four categories: (1) unconvicted G2M/G2F, no separation from G2, (2) unconvicted G2M/G2F, separation from G2, (3) convicted G2M/G2F, no separation from G2, and (4) convicted G2M/G2F, separation from G2. For the G2 male-G3 male relationship (G2M-G3M), the percentage of convicted G3 males in each of the 4 categories was 16.5%, 22.0%, 34.8%, and 43.2%, respectively, with the fourth category of ‘convicted G2M, separation from G2’ having the largest percentage of convicted G3 males. For the G2 female-G3 male relationship (G2F-G3M), the percentage of convicted G3 males in each of the 4 categories was 20.1%, 27.8%, 61.5%, and 83.3%, respectively, with the fourth category of ‘convicted G2F, separation from G2’ having the largest percentage of convicted G3 males. Therefore, it seems that a convicted G2 parent (either a father or a mother) and separation both act as risk factors and that the two risk factors of a convicted G2 parent and separation are having additive effects. For example, there were 27.8% G3 males with a conviction who were separated but not with a convicted G2 female, whereas when a convicted G2 female was combined with separation the percentage of convicted G3 males increased to 83.3%. Clearly, it is the combination of risk factors that is important.
Separation from a parent as a possible moderator of convictions of G2 males and G2 females versus convictions of G3 males (G2-G3M)

<table>
<thead>
<tr>
<th>Interaction</th>
<th>F</th>
<th>p</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convicted G2M</td>
<td>11.829</td>
<td>.000</td>
<td>Unconvicted G2M/No SEP from G2</td>
</tr>
<tr>
<td>SEP from G2</td>
<td>1.455</td>
<td>.229</td>
<td>Unconvicted G2M/SEP from G2</td>
</tr>
<tr>
<td>Convicted G2M*SEP from G2</td>
<td>.013</td>
<td>.790</td>
<td>Convicted G2M/No SEP from G2</td>
</tr>
<tr>
<td>G2</td>
<td></td>
<td></td>
<td>Convicted G2M/SEP from G2</td>
</tr>
</tbody>
</table>

| Convicted G2F | 20.328 | .000  | Unconvicted G2F/No SEP from G2   | 20.1 |
| SEP from G2   | 1.877  | .172  | Unconvicted G2F/SEP from G2      | 27.8 |
| Convicted G2F*SEP from G2 | .431  | .512  | Convicted G2F/No SEP from G2     | 61.5 |
|               |       |       | Convicted G2F/SEP from G2        | 83.3 |

*p<.05; Convicted G2M = Convicted G2 male; Convicted G2F = Convicted G2 female; SEP from G2 = A G3 male had been separated from his G2 father before age 15; No SEP from G2 = A G3 male had lived with his G2 father for the whole time period up to his 16th birthday.

G2-G3 Female Families

Table 5.4.9 shows that the interactions between convicted G2M*SEP from G2 (p=.491) and between convicted G2F*SEP from G2 (p=.480) were not significant. Thus, the effect of convicted G2 parents on convicted G3 females was not moderated by having been separated from a G2 father before age 15.

The right half of the table shows the percentage of convicted G3 females in each of the following four categories: (1) unconvicted G2M/G2F, no separation from G2, (2) unconvicted G2M/G2F, separation from G2, (3) convicted G2M/G2F, no separation from G2, and (4) convicted G2M/G2F, separation from G2. For the G2 male-G3 female relationship (G2M-G3F), the percentage of convicted G3 females in each of the 4 categories was 6.5%, 8.1%, 6.9%, and 14.5%, respectively, with the fourth category of ‘convicted G2M, separation from G2’ having the largest percentage of convicted G3 females. There appears to be an effect of separation only when there is a convicted G2 male. Perhaps no separation acts as a protective factor against the risk factor of a convicted G2 male. For the G2 female-G3 female relationship...
(G2F-G3F), the percentage of convicted G3 females in each of the 4 categories was 5.3%, 10.4%, 21.4%, and 18.2%, respectively, with the third category of ‘convicted G2F, no separation from G2’ having the largest percentage of convicted G3 females. Those G3 females who were separated were less likely to be convicted if their mother was convicted than those G3 females who were not separated (18.2% versus 21.4%). Perhaps being separated from a G2 father before age 15 acts as a protective factor against the risk factor of a convicted G2 mother.

Table 5.4.9
Separation from a parent as a possible moderator of convictions of G2 males and G2 females versus convictions of G3 females (G2-G3F)

<table>
<thead>
<tr>
<th>Interaction</th>
<th>F</th>
<th>p</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convicted G2M</td>
<td>.819</td>
<td>.366</td>
<td>Unconvicted G2M/No SEP from G2 6.5</td>
</tr>
<tr>
<td>SEP from G2</td>
<td>1.507</td>
<td>.221</td>
<td>Unconvicted G2M/SEP from G2 8.1</td>
</tr>
<tr>
<td>Convicted G2M*SEP from G2</td>
<td>.657</td>
<td>.419</td>
<td>Convicted G2M/No SEP from G2 6.9</td>
</tr>
<tr>
<td>G2</td>
<td></td>
<td></td>
<td>Convicted G2M/SEP from G2 14.5</td>
</tr>
</tbody>
</table>

| Convicted G2F                    | 4.150 | .043 | Unconvicted G2F/No SEP from G2 5.3 |
| SEP from G2                      | .024  | .877 | Unconvicted G2F/SEP from G2 10.4 |
| Convicted G2F*SEP from G2        | .501  | .480 | Convicted G2F/No SEP from G2 21.4 |
| G2                               |     |      | Convicted G2F/SEP from G2 18.2 |

*p<.05; Convicted G2M = Convicted G2 male; Convicted G2F = Convicted G2 female; SEP from G2 = A G3 female had been separated from his G2 father before age 15; No SEP from G2 = A G3 female had lived with his G2 father for the whole time period up to his 16th birthday.
5.5. Do G1 (generation 1) convictions predict G3 (generation 3) convictions (G1-G3)?

In this analysis, the focus is on G1 grandparents versus G3 grandchildren. As noted earlier, there were 691 G3 children whose name and date of birth were known. However, the 31 G3 children who had been abroad since birth could not be searched, and the other five G3 children were not searched because of insufficient identifying particulars. Therefore, 655 G3 children were searched. These included 342 G3 males and 313 G3 females. This left (1) 342 families with a G1 grandfather, a G1 grandmother and a G3 grandson who were all searched and at risk of conviction, and (2) 313 families with a G1 grandfather, a G1 grandmother and a G3 granddaughter who were all searched and at risk of conviction. In this analysis, convictions of G3 grandchildren up to their age 32 were compared with convictions of G1 grandparents up to the same age.

G1-G3 male families

Table 5.5.1 shows the prevalence of convictions up to age 32 for all G1 grandfathers, G1 grandmothers, and G3 grandsons; 20.5% of G1 grandfathers and 8.2% of G1 grandmothers were convicted, compared with 27.2% of G3 grandsons.

<table>
<thead>
<tr>
<th>Number searched</th>
<th>G1 grandfather</th>
<th>G1 grandmother</th>
<th>G3 grandson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number convicted (%)</td>
<td>70 (20.5%)</td>
<td>28 (8.2%)</td>
<td>93 (27.2%)</td>
</tr>
<tr>
<td>Number unconvicted (%)</td>
<td>272 (79.5%)</td>
<td>314 (91.8%)</td>
<td>249 (72.8%)</td>
</tr>
</tbody>
</table>

NB The G1 are not all different people

5.5.1. G1 male-G3 male (G1M-G3M)

Table 5.5.2 below shows the percentage of G3 males convicted up to age 32, given convicted or unconvicted G1 males up to age 32. For example, 37.1% of G3 males with a convicted G1 male were themselves convicted, compared with 24.6% of G3 males with an
unconvicted G1 male (OR=1.808, CI=1.035-3.158). Convictions of G1 grandfathers up to age 32 were significantly predictive of convictions of G3 grandsons up to age 32 (p=.037).

### Table 5.5.2
Percentage of G3 males convicted, given convicted or unconvicted G1 males (G1M-G3M)

<table>
<thead>
<tr>
<th></th>
<th>% Convicted</th>
<th>% Unconvicted</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G3 male</td>
<td>G3 male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1 male convicted</td>
<td>26 (37.1%)</td>
<td>44 (62.9%)</td>
<td>70 (20.5%)</td>
<td>1.808</td>
<td>1.035-3.158</td>
</tr>
<tr>
<td>G1 male unconvicted</td>
<td>67 (24.6%)</td>
<td>205 (74.4%)</td>
<td>272 (79.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93 (27.2%)</td>
<td>249 (72.8%)</td>
<td>342 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*OR* odds ratio, *CI* 95% confidence interval

#### 5.5.2. G1 female-G3 male (G1F-G3M)

Table 5.5.3 shows the percentage of G3 males convicted up to age 32, given convicted or unconvicted G1 females up to age 32. For example, 35.7% of G3 males with a convicted G1 female were themselves convicted, compared with 26.4% of G3 males with an unconvicted G1 female (OR=1.546, CI=0.686-3.485). Convictions of G1 grandmothers up to age 32 did not significantly predict convictions of G3 grandsons up to age 32 (p=.293).

### Table 5.5.3
Percentage of G3 males convicted, given convicted or unconvicted G1 females (G1F-G3M)

<table>
<thead>
<tr>
<th></th>
<th>% Convicted</th>
<th>% Unconvicted</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G3 male</td>
<td>G3 male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1 female convicted</td>
<td>10 (35.7%)</td>
<td>18 (64.3%)</td>
<td>28 (8.2%)</td>
<td>1.546</td>
<td>0.686-3.485</td>
</tr>
<tr>
<td>G1 female unconvicted</td>
<td>83 (26.4%)</td>
<td>231 (73.6%)</td>
<td>314 (91.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93 (27.2%)</td>
<td>249 (72.8%)</td>
<td>342 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*OR* odds ratio, *CI* 95% confidence interval
**G1-G3 female families**

Table 5.5.4 below shows the prevalence of convictions up to age 32 for all G1 grandfathers, G1 grandmothers, and G3 granddaughters; 24.9% of G1 grandfathers and 7.7% of G1 grandmothers were convicted, compared with 8.6% of G3 granddaughters.

<table>
<thead>
<tr>
<th></th>
<th>G1 grandfather</th>
<th>G1 grandmother</th>
<th>G3 granddaughter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number searched</td>
<td>313</td>
<td>313</td>
<td>313</td>
</tr>
<tr>
<td>Number convicted (%)</td>
<td>78 (24.9%)</td>
<td>24 (7.7%)</td>
<td>27 (8.6%)</td>
</tr>
<tr>
<td>Number unconvicted (%)</td>
<td>235 (75.1%)</td>
<td>289 (92.3%)</td>
<td>286 (91.4%)</td>
</tr>
</tbody>
</table>

NB The G1 are not all different people

### 5.5.3. G1 male-G3 female (G1M-G3F)

Table 5.5.5 shows the percentage of G3 females convicted up to age 32, given convicted or unconvicted G1 males up to age 32. For example, 14.1% of G3 females with a convicted G1 male were themselves convicted, compared with 6.8% of G3 females with an unconvicted G1 male (OR=2.247, CI=0.995-5.077). Convictions of G1 grandfathers up to age 32 only marginally predicted convictions of G3 granddaughters (p=.052).

<table>
<thead>
<tr>
<th></th>
<th>% Convicted</th>
<th>% Unconvicted</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1 male convicted</td>
<td>11 (14.1%)</td>
<td>67 (85.9%)</td>
<td>78 (24.9%)</td>
<td>2.247</td>
<td>0.995-5.077</td>
</tr>
<tr>
<td>G1 male unconvicted</td>
<td>16 (6.8%)</td>
<td>219 (93.2%)</td>
<td>235 (75.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27 (8.6%)</td>
<td>286 (91.4%)</td>
<td>313 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*OR* odds ratio, *CI* 95% confidence interval

### 5.5.4. G1 female-G3 female (G1F-G3F)

Table 5.5.6 shows the percentage of G3 females convicted up to age 32, given convicted or unconvicted G1 females up to age 32. For example, 16.7% of G3 females with a
convicted G1 female were themselves convicted, compared with 8.0% of G3 females with an unconvicted G1 females (OR=2.313, CI=0.729-7.341). The OR was quite high, but convictions of G1 grandmothers up to age 32 did not significantly predict convictions of G3 granddaughters (p=.155), probably because of small numbers of G1 females and G3 females who were convicted.

### Table 5.5.6
Percentage of G3 females convicted, given convicted or unconvicted G1 females (G1F-G3F)

<table>
<thead>
<tr>
<th></th>
<th>% Convicted G3 female</th>
<th>% Unconvicted G3 female</th>
<th>Total</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1 female convicted</td>
<td>4 (16.7%)</td>
<td>20 (83.3%)</td>
<td>24 (7.7%)</td>
<td>2.313</td>
<td>0.729-7.341</td>
</tr>
<tr>
<td>G1 female unconvicted</td>
<td>23 (8.0%)</td>
<td>266 (92.0%)</td>
<td>289 (92.3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27 (8.6%)</td>
<td>286 (91.4%)</td>
<td>313 (100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overall, there was one significant relationship between G1 grandparents and G3 children: convicted G1 grandfathers predicted convicted G3 sons (OR=1.808, CI=1.035-3.158). The relationship between convicted G1 grandfathers and convicted G3 daughters was marginally significant. (p=.052). Nevertheless, the four comparisons (G1M-G3M, G1F-G3M, G1M-G3F, G1F-G3F) had quite high ORs.

In the G1-G3 analyses, same-sex intergenerational relationships were generally stronger than opposite-sex relationships. The G1 grandfather-G3 grandson relationship was stronger than the G1 grandmother-G3 grandson relationship; and the G1 grandmother-G3 granddaughter relationship was stronger than the G1 grandfather-G3 granddaughter relationship. It is noteworthy that the strength of intergenerational transmission of convictions between G1 grandparents and G3 grandchildren was clearly lower than in the G1-G2 analyses and in the G2-G3 analyses.
5.6. Is the G1-G3 relationship significant when controlling for G2?

As mentioned before, there was one significant between G1 grandparents and G3 grandchildren: convicted G1 grandfathers and convicted G3 grandsons (OR=1.808, CI=1.035-3.158). I then examined whether convicted G1 grandfathers were predictive of convicted G3 grandsons when controlling for convicted G2 parents that also predicted G3 convictions. A logistic regression was carried out.

5.6.1. G1 male-G3 male (G1M-G3M)

Table 5.6.1. shows two important covariates: convictions of G2 males (p=.003) and convictions of G2 females (p<.001). Convictions of G1 grandfathers did not significantly predict convictions of G3 grandsons when controlling for convictions of G2 fathers and G2 mothers, with the partial OR decreasing from 1.808 to 1.224.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convictions of G1 males</td>
<td>.202</td>
<td>.315</td>
<td>1.224</td>
<td>0.660-2.269</td>
</tr>
<tr>
<td>Convictions of G2 males</td>
<td>.802</td>
<td>.271</td>
<td>2.229**</td>
<td>1.310-3.794</td>
</tr>
<tr>
<td>Convictions of G2 females</td>
<td>1.484</td>
<td>.412</td>
<td>4.412***</td>
<td>2.030-10.160</td>
</tr>
</tbody>
</table>

**p<.01, ***p<.001

Note: Exp(B)=Partial Odds Ratio; CI=Confidence Interval

5.6.2. G1 male-G3 female (G1M-G3F)

As mentioned before, convictions of G1 grandfathers only marginally predicted convictions of G3 granddaughters (p=.052). I also examined whether convicted G1 grandfathers were predictive of convicted G3 granddaughters when controlling for convicted G2 parents that also predicted G3 convictions. Table 5.6.2. shows no covariates: convictions of G2 males (p=.418) and convictions of G2 females (p=.152). Convictions of G1 grandfathers did not predict convictions of G3 granddaughters when controlling for convictions of G2 fathers and G2 mothers, with the partial OR decreasing from 2.247 to 1.627).
Table 5.6.2
The effect of convictions of G1 males up to age 32 → convictions of G3 females up to age 32 when controlling for convictions of G2 males and G2 females up to age 32

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convictions of G1 males</td>
<td>.487</td>
<td>.463</td>
<td>1.627</td>
<td>0.657-4.027</td>
</tr>
<tr>
<td>Convictions of G2 males</td>
<td>.371</td>
<td>.457</td>
<td>1.449</td>
<td>0.591-3.549</td>
</tr>
<tr>
<td>Convictions of G2 females</td>
<td>.756</td>
<td>.529</td>
<td>2.131</td>
<td>0.756-6.004</td>
</tr>
</tbody>
</table>

**p<.01, ***p<.001
Note: Exp(B)=Partial Odds Ratio; CI=Confidence Interval

5.7. Does having a convicted G1 predict convictions of G2 males when controlling for G1 risk factors for G2 male offending? Which risk factors make the G1-G2 relationship nonsignificant? These are possible mediators.

In this analysis, the focus is on G1 parents versus G2 males. As mentioned before, there were 411 G2 males. However, two G2 males emigrated before age of 10, and another five G2 males were emigrated up to age 21. They were not searched and so were not at risk of being convicted in England and Wales. This left 404 families with a G1 father, a G1 mother and a G2 son who were all searched and at risk of conviction. For comparability, convictions of G2 males up to age 32 were compared with convictions of G1 parents up to the same age.

G1-G2 male families

Table 5.7.1 (based on Tables 5.1.2 and 5.1.3) shows the percentage of G2 sons who were convicted up to age 32, given convicted or unconvicted G1 parents up to age 32. For example, 69.1% of G2 sons with a convicted G1 father were themselves convicted, compared with 32.5% of G2 sons with an unconvicted G1 father. 66.7% of G2 sons with a convicted G1 mother were themselves convicted, compared with 37.7% of G2 sons with an unconvicted G1 mother. Convictions of G1 parents significantly predicted convictions of G2 sons.
Table 5.7.1
Percentage of G2 sons convicted up to age 32, given convicted or unconvicted G1 parents up to age 32 (G1-G2M)

<table>
<thead>
<tr>
<th></th>
<th>Convicted G2 male</th>
<th>Unconvicted G2 male</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1 father</td>
<td>56 (69.1%)</td>
<td>105 (32.5%)</td>
<td>4.651</td>
<td>2.749-7.868</td>
</tr>
<tr>
<td>G1 mother</td>
<td>20 (66.7%)</td>
<td>141 (37.7%)</td>
<td>3.305</td>
<td>1.504-7.263</td>
</tr>
</tbody>
</table>

*OR* odds ratio, *CI* 95% confidence interval

I then decided to examine whether convictions of G1 parents up to age 32 had a direct effect or an indirect effect on convictions of G2 males up to age 32. I examined variables which were possible mediators of the effect. Here, I used age 8-10 risk factors for G2 male offending up to age 32, which were dichotomized, as far as possible, into the “worst” quarter versus the remainder (see Farrington & Loeber, 2000).

The important childhood risk factors for offending by the G2 males used in this section, which have been previously linked to the intergenerational transmission of antisocial behaviour (Farrington et al., 2009; Farrington et al., 2015) include six parental risk factors (authoritarian G1 father, authoritarian G1 mother, young G1 father, young G1 mother, nervous G1 father, nervous G1 mother), five family risk factors (uninvolved G1 father, harsh discipline, poor supervision, parental conflict, disrupted family), four socio-economic risk factors (low family income, large family size, poor housing, low social class), three attainment risk factors (low nonverbal IQ, low verbal IQ, low attainment), three impulsiveness risk factors (high daring, high impulsivity, high hyperactivity), and two behavioural risk factors (high troublesomeness, high dishonesty). The description below provides more information on each of these age 8-10 risk factors. For more information about these G1 risk factors, see Farrington et al. (2015).

5.7.1. Mediation analysis (G1M-G2M)

Using Baron and Kenny (1986) mediation framework, the following conditions are necessary to establish mediation using regression analyses: (1) convictions of G1 males must be shown to affect convictions of G2 males; (2) convictions of G1 males must affect the proposed mediator; (3) the mediator must affect convictions of G2 males; and (4) the effect of convictions of G1 males on convictions of G2 males decreases when controlling for the
mediator. I examined whether the predictive power of convictions of G1 males on convictions of G2 males decreased after controlling for the above 23 possible mediating factors.

Table 5.7.2 shows the four steps suggested by Baron and Kenny (1986) with regard to the possible mediating factors of the effect of convictions of G1 males up to age 32 on convictions of G2 males up to age 32. In Step 1, I found (as previously) that convictions of G1 males up to age 32 significantly predicted convictions of G2 males up to age 32 (OR=4.651, CI=2.749-7.868). In Step 2, I found that convictions of G1 males up to age 32 significantly predicted four parental risk factors (young G1 father, young G1 mother, nervous G1 father, nervous G1 mother), four family risk factors (harsh discipline, poor supervision, parental conflict, disrupted family), four socio-economic risk factors (low family income, large family size, poor housing, low social class), three attainment risk factors (low nonverbal IQ, low verbal IQ, low attainment), three impulsiveness risk factors (high daring, high impulsivity, high hyperactivity), and two behavioural risk factors (high troublesomeness, high dishonesty). In Step 3, four family risk factors (harsh discipline, poor supervision, parental conflict, disrupted family) significantly predicted convictions of G2 males up to age 32, as did three socio-economic risk factors (low family income, large family size, poor housing), three attainment risk factors (low nonverbal IQ, low verbal IQ, low attainment), three impulsiveness risk factors (high daring, high impulsivity, high hyperactivity), and two behavioural risk factors (high troublesomeness, high dishonesty). In Step 4, when controlling for all possible mediators independently, the effect of convicted G1 males on convicted G2 males was reduced most by disrupted family, poor supervision, and parental conflict. Fourteen factors satisfied the conditions set out by Baron and Kenny: harsh discipline, poor supervision, parental conflict, disrupted family, low family income, large family size, poor housing, low nonverbal IQ, low verbal IQ, low attainment, high daring, high impulsivity, high hyperactivity, and high troublesomeness. It was interesting that the G1-G2 relationship became strong after controlling for high dishonesty. When controlling for all 14 of these variables together, convictions of G1 males up to age 32 still significantly predicted convictions of G2 males up to age 32, with the OR decreasing from 4.651 to 2.752 (CI=1.374-5.512)

Table 5.7.2 shows that there was the greatest decrease in the OR (from 4.651 to 3.898) after controlling for disrupted family. Adding the other variables in turn, the greatest decrease in the OR (from 3.48 to 3.324) occurred after controlling for disrupted family and poor supervision. Continuing to add mediators one by one, the most important mediators were
disrupted family, poor supervision, large family size, low nonverbal IQ, parental conflict, high daring, poor housing, high troublesomeness, high impulsivity, and low verbal IQ. After controlling for all these ten variables, the relationship between convicted G1 males and convicted G2 males was reduced to 2.290 but still significant (CI=1.223-4.288). Therefore, the effect of convictions of G1 males up to age 32 was mediated by several important variables, especially disrupted family, poor supervision, large family size, low nonverbal IQ, parental conflict, high daring, poor housing, high troublesomeness, high impulsivity, and low verbal IQ. Other important mediators were harsh discipline, low family income, low attainment, and high hyperactivity.

Table 5.7.2
Possible mediators between convictions of G1 males and convictions of G2 males

<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>G1MCON32→G2MCON32</td>
<td>1.537</td>
<td>.268</td>
<td>4.651***</td>
<td>2.749-7.868</td>
</tr>
<tr>
<td>2</td>
<td>Parental</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Authoritarian G1 Father</td>
<td>-.106</td>
<td>.390</td>
<td>.899</td>
<td>0.419-1.929</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Authoritarian G1 Mother</td>
<td>.240</td>
<td>.313</td>
<td>1.271</td>
<td>0.688-2.349</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Young G1 Father</td>
<td>1.116</td>
<td>.282</td>
<td>3.051***</td>
<td>1.756-5.302</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Young G1 Mother</td>
<td>.828</td>
<td>.257</td>
<td>2.288***</td>
<td>1.383-3.785</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Nervous G1 Father</td>
<td>.585</td>
<td>.295</td>
<td>1.795*</td>
<td>1.006-3.202</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Nervous G1 Mother</td>
<td>.615</td>
<td>.261</td>
<td>1.849*</td>
<td>1.109-3.084</td>
</tr>
<tr>
<td></td>
<td>Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Uninvolved G1 father</td>
<td>.005</td>
<td>.329</td>
<td>1.005</td>
<td>0.528-1.914</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Harsh Discipline</td>
<td>.925</td>
<td>.262</td>
<td>2.523***</td>
<td>1.510-4.214</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Poor Supervision</td>
<td>1.031</td>
<td>.289</td>
<td>2.804***</td>
<td>1.590-4.944</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Parental Conflict</td>
<td>.961</td>
<td>.280</td>
<td>2.614***</td>
<td>1.510-4.526</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Disrupted Family</td>
<td>1.383</td>
<td>.269</td>
<td>3.985***</td>
<td>2.353-6.749</td>
</tr>
<tr>
<td></td>
<td>Socio-economic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Low Family Income</td>
<td>1.175</td>
<td>.267</td>
<td>3.237***</td>
<td>1.917-5.465</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Large Family Size</td>
<td>1.074</td>
<td>.265</td>
<td>2.928***</td>
<td>1.742-4.920</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Poor Housing</td>
<td>.954</td>
<td>.253</td>
<td>2.595***</td>
<td>1.580-4.263</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Low Social Class</td>
<td>.879</td>
<td>.281</td>
<td>2.408**</td>
<td>1.387-4.181</td>
</tr>
<tr>
<td></td>
<td>Attainment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Low Nonverbal IQ</td>
<td>1.067</td>
<td>.263</td>
<td>2.907***</td>
<td>1.736-4.867</td>
</tr>
</tbody>
</table>
### Table 5.7.2
Possible mediators between convictions of G1 males and convictions of G2 males

<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G1MCON32→Low Verbal IQ</td>
<td>.724</td>
<td>.267</td>
<td>2.063**</td>
<td>1.224-3.478</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→Low Attainment</td>
<td>1.025</td>
<td>.274</td>
<td>2.787***</td>
<td>1.629-4.768</td>
</tr>
<tr>
<td></td>
<td>Impulsiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G1MCON32→High Daring</td>
<td>.703</td>
<td>.259</td>
<td>2.020**</td>
<td>1.216-3.355</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→High Impulsivity</td>
<td>.771</td>
<td>.265</td>
<td>2.161**</td>
<td>1.286-3.632</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→High Hyperactivity</td>
<td>1.367</td>
<td>.275</td>
<td>3.924***</td>
<td>2.289-6.727</td>
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<tr>
<td></td>
<td>Behaviour</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>G1MCON32→High Troublesomeness</td>
<td>.947</td>
<td>.271</td>
<td>2.578***</td>
<td>1.516-4.385</td>
</tr>
<tr>
<td></td>
<td>G1MCON32→High Dishonesty</td>
<td>1.070</td>
<td>.291</td>
<td>2.917***</td>
<td>1.649-5.158</td>
</tr>
<tr>
<td>3</td>
<td>Parental</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Young G1 Father→G2MCON32</td>
<td>-.001</td>
<td>.261</td>
<td>.999</td>
<td>0.599-1.665</td>
</tr>
<tr>
<td></td>
<td>Young G1 Mother→G2MCON32</td>
<td>.363</td>
<td>.219</td>
<td>1.438†</td>
<td>0.937-2.207</td>
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<tr>
<td></td>
<td>Nervous G1 Father→G2MCON32</td>
<td>.268</td>
<td>.258</td>
<td>1.307</td>
<td>0.788-2.168</td>
</tr>
<tr>
<td></td>
<td>Nervous G1 Mother→G2MCON32</td>
<td>.338</td>
<td>.223</td>
<td>1.403</td>
<td>0.906-2.171</td>
</tr>
<tr>
<td></td>
<td>Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Harsh Discipline→G2MCON32</td>
<td>.467</td>
<td>.228</td>
<td>1.595*</td>
<td>1.021-2.491</td>
</tr>
<tr>
<td></td>
<td>Poor Supervision→G2MCON32</td>
<td>.961</td>
<td>.268</td>
<td>2.615***</td>
<td>1.548-4.419</td>
</tr>
<tr>
<td></td>
<td>Parental Conflict→G2MCON32</td>
<td>.854</td>
<td>.249</td>
<td>2.349***</td>
<td>1.442-3.825</td>
</tr>
<tr>
<td></td>
<td>Disrupted Conflict→G2MCON32</td>
<td>1.065</td>
<td>.246</td>
<td>2.902***</td>
<td>1.792-4.699</td>
</tr>
<tr>
<td></td>
<td>Socio-economic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Family Income→G2MCON32</td>
<td>.797</td>
<td>.240</td>
<td>2.219***</td>
<td>1.387-3.550</td>
</tr>
<tr>
<td></td>
<td>Large Family Size→G2MCON32</td>
<td>1.165</td>
<td>.240</td>
<td>3.205***</td>
<td>2.001-5.133</td>
</tr>
<tr>
<td></td>
<td>Poor Housing→G2MCON32</td>
<td>.937</td>
<td>.212</td>
<td>2.553***</td>
<td>1.684-3.871</td>
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<td></td>
<td>Low Social Class→G2MCON32</td>
<td>.356</td>
<td>.253</td>
<td>1.428</td>
<td>0.870-2.343</td>
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<td>Attainment</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Low Nonverbal IQ→G2MCON32</td>
<td>.880</td>
<td>.233</td>
<td>2.412***</td>
<td>1.527-3.810</td>
</tr>
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### Table 5.7.2
Possible mediators between convictions of G1 males and convictions of G2 males

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### Table 5.7.2
Possible mediators between convictions of G1 males and convictions of G2 males

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### Table 5.7.2
Possible mediators between convictions of G1 males and convictions of G2 males

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<th>Exp(B)</th>
<th>95% CI</th>
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<td>(cf. Disrupted Family, Poor Supervision, Large Family Size, Low Nonverbal IQ, Parental Conflict, High Daring, Poor Housing, High Troublesomeness, High Impulsivity)</td>
<td>.828</td>
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<td>2.290**</td>
<td>1.223-4.288</td>
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<td>G1MCON32→G2MCON32</td>
<td>(cf. Disrupted Family, Poor Supervision, Large Family Size, Low Nonverbal IQ, Parental Conflict, High Daring, Poor Housing, High Troublesomeness, High Impulsivity, Low Verbal IQ)</td>
<td>1.023</td>
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<td>G1MCON32→G2MCON32</td>
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<td>1.023</td>
<td>.354</td>
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<td>1.374-5.512</td>
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*p<.05, **p<.01, ***p<.001, †p<.10; cf = controlling for; Exp(B) = Partial Odds Ratio; CI = Confidence Interval; G1MCON32 = convictions of G1 males up to age 32; G2MCON32 = convictions of G2 males up to age 32

#### 5.7.2. Mediation analysis (G1F-G2M)

I examined whether the predictive power of convictions of G1 females on convictions of G2 males decreased after controlling for the above 23 possible mediating factors. Table 5.7.3 shows the four steps suggested by Baron and Kenny (1986) with regard to the possible mediators of the effect of convictions of G1 females up to age 32 on convictions of G2 males up to age 32. In Step 1, I found (as previously) that convictions of G1 females up to age 32 significantly predicted convictions of G2 males up to age 32 (OR=3.305, CI=1.504-7.263). In Step 2, I found that convictions of G1 females up to age 32 significantly predicted two parental risk factors (nervous G1 father and nervous G1 mother), four family risk factors (harsh discipline, poor supervision, parental conflict, disrupted family), three socio-economic risk factors (low family income, large family size, poor housing), three attainment risk factors (low
nonverbal IQ, low verbal IQ, low attainment), one impulsiveness risk factor (high hyperactivity), and two behavioural risk factors (high troublesomeness, high dishonesty). In Step 3, four family risk factors (harsh discipline, poor supervision, parental conflict, disrupted family) significantly predicted convictions of G2 males up to age 32, as did three socio-economic risk factors (low family income, large family size, poor housing), three attainment risk factors (low nonverbal IQ, low verbal IQ, low attainment), one impulsiveness risk factor (high hyperactivity), and two behavioural risk factors (high troublesomeness, high dishonesty). In Step 4, when controlling for all possible mediators independently, the effect of convicted G1 females on convicted G2 males was reduced most by high dishonesty, low attainment, large family size, and poor housing. Thirteen factors satisfied the conditions set out by Baron and Kenny: harsh discipline, poor supervision, parental conflict, disrupted family, low family income, large family size, poor housing, low nonverbal IQ, low verbal IQ, low attainment, high hyperactivity, high troublesomeness, and high dishonesty. When controlling for all 13 of these variables together, the relationship between convicted G1 females and convicted G2 males was reduced to 1.212 and became nonsignificant (CI=0.409-3.587).

Table 5.7.3 shows that the greatest decrease in the OR (from 3.305 to 2.044) occurred after controlling for high dishonesty, and the effect of convicted G1 females was reduced to insignificance (CI=0.830-5.036). Adding the other variables in turn, the greatest decrease in the OR (from 2.044 to 1.522) occurred after controlling for high dishonesty and low attainment. Continuing to add mediators one by one, the most important mediators were high dishonesty, low attainment, poor supervision, poor housing, large family size, high troublesomeness, low nonverbal IQ, and disrupted family. After controlling for all these eight variables, the relationship between convicted G1 females and convicted G2 males was reduced to 0.788 and became nonsignificant (CI=0.269-2.310). Therefore, the effect of convictions of G1 females up to age 32 on convictions of G2 males up to age 32 was mediated by several variables, with the most important being high dishonesty. Other important mediators were low attainment, poor supervision, poor housing, and large family size, high troublesomeness, low nonverbal IQ, and disrupted family.


<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
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Table 5.7.3
Possible mediators between convictions of G1 females and convictions of G2 males
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Possible mediators between convictions of G1 females and convictions of G2 males

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<th>Exp(B)</th>
<th>95% CI</th>
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<td>Low Family Income→G2MCON32</td>
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<td>.240</td>
<td>2.219***</td>
<td>1.387-3.550</td>
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<td>Large Family Size→G2MCON32</td>
<td>1.165</td>
<td>.240</td>
<td>3.205***</td>
<td>2.001-5.133</td>
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<td></td>
<td>Poor Housing→G2MCON32</td>
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<td>.212</td>
<td>2.553***</td>
<td>1.684-3.871</td>
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<tr>
<td>Attainment</td>
<td>Low Nonverbal IQ→G2MCON32</td>
<td>.880</td>
<td>.233</td>
<td>2.412***</td>
<td>1.527-3.810</td>
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<td>Low Verbal IQ→G2MCON32</td>
<td>.743</td>
<td>.233</td>
<td>2.103***</td>
<td>1.331-3.321</td>
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<td>Low Attainment→G2MCON32</td>
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<td>.251</td>
<td>3.381***</td>
<td>2.068-5.528</td>
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<td>Impulsiveness</td>
<td>High Hyperactivity→G2MCON32</td>
<td>.748</td>
<td>.251</td>
<td>2.112**</td>
<td>1.290-3.457</td>
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<td>Behaviour</td>
<td>High Troublesomeness→G2MCON32</td>
<td>1.375</td>
<td>.252</td>
<td>3.956***</td>
<td>2.412-6.488</td>
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<td>High Dishonesty→G2MCON32</td>
<td>.921</td>
<td>.252</td>
<td>2.513***</td>
<td>1.535-4.114</td>
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<td>4 Family</td>
<td>G1FCON32→G2MCON32 (cf. Harsh Discipline)</td>
<td>1.117</td>
<td>.410</td>
<td>3.056**</td>
<td>1.369-6.821</td>
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<td>G1FCON32→G2MCON32 (cf. Poor Supervision)</td>
<td>.958</td>
<td>.418</td>
<td>2.607*</td>
<td>1.149-5.915</td>
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<td>G1FCON32→G2MCON32 (cf. Parental Conflict)</td>
<td>1.155</td>
<td>.410</td>
<td>3.175**</td>
<td>1.421-7.097</td>
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<td>G1FCON32→G2MCON32 (cf. Disrupted Family)</td>
<td>1.059</td>
<td>.412</td>
<td>2.884**</td>
<td>1.286-6.468</td>
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<td>Socio-economic</td>
<td></td>
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<tr>
<td></td>
<td>G1FCON32→G2MCON32</td>
<td>.953</td>
<td>.415</td>
<td>2.595*</td>
<td>1.151-5.850</td>
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### Table 5.7.3

Possible mediators between convictions of G1 females and convictions of G2 males

<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
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<tr>
<td></td>
<td>(cf. Low Family Income)</td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>.843</td>
<td>.420</td>
<td>2.323*</td>
<td>1.019-5.294</td>
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<tr>
<td>(cf. Large Family Size)</td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>.871</td>
<td>.415</td>
<td>2.390*</td>
<td>1.059-5.394</td>
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<tr>
<td>(cf. Poor Housing)</td>
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<td></td>
<td>Attainment</td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>1.047</td>
<td>.410</td>
<td>2.848*</td>
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<tr>
<td>(cf. Low Nonverbal IQ)</td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>1.065</td>
<td>.408</td>
<td>2.902**</td>
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<tr>
<td>(cf. Low Verbal IQ)</td>
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<td>G1FCON32→G2MCON32</td>
<td>.780</td>
<td>.428</td>
<td>2.182†</td>
<td>0.942-5.052</td>
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<td>(cf. Low Attainment)</td>
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<td>Impulsiveness</td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>1.063</td>
<td>.409</td>
<td>2.895**</td>
<td>1.299-6.450</td>
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<tr>
<td>(cf. High Hyperactivity)</td>
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<td></td>
<td>Behaviour</td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>.944</td>
<td>.421</td>
<td>2.569*</td>
<td>1.127-5.859</td>
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<td>(cf. High Troublesomeness)</td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>.715</td>
<td>.460</td>
<td>2.044</td>
<td>0.830-5.036</td>
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<tr>
<td>(cf. High Dishonesty)</td>
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</tr>
<tr>
<td>G1FCON32→G2MCON32</td>
<td>.420</td>
<td>.484</td>
<td>1.522</td>
<td>0.589-3.931</td>
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<tr>
<td>(cf. High Dishonesty, Low Attainment)</td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>.139</td>
<td>.516</td>
<td>1.150</td>
<td>0.418-3.159</td>
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<tr>
<td>(cf. High Dishonesty, Low Attainment, Poor Supervision)</td>
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<td></td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>-.044</td>
<td>.532</td>
<td>0.957</td>
<td>0.337-2.713</td>
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<tr>
<td>(cf. High Dishonesty, Low Attainment, Poor Supervision, Poor Housing)</td>
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<tr>
<td>G1FCON32→G2MCON32</td>
<td>-.141</td>
<td>.548</td>
<td>0.868</td>
<td>0.296-2.543</td>
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<tr>
<td>(cf. High Dishonesty, Low Attainment, Poor Supervision, Poor Housing, Large Family Size)</td>
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</tbody>
</table>
### Table 5.7.3

Possible mediators between convictions of G1 females and convictions of G2 males

<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G1FCON32→ G2MCON32 (cf. High Dishonesty, Low Attainment, Poor Supervision, Poor Housing, Large Family Size, High Troublesomeness)</td>
<td>-.191</td>
<td>.553</td>
<td>0.826</td>
<td>0.280-2.443</td>
</tr>
<tr>
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<td>G1FCON32→ G2MCON32 (cf. High Dishonesty, Low Attainment, Poor Supervision, Poor Housing, Large Family Size, High Troublesomeness, Low Nonverbal IQ)</td>
<td>-.195</td>
<td>.552</td>
<td>0.823</td>
<td>0.279-2.427</td>
</tr>
<tr>
<td></td>
<td>G1FCON32→ G2MCON32 (cf. High Dishonesty, Low Attainment, Poor Supervision, Poor Housing, Large Family Size, High Troublesomeness, Low Nonverbal IQ, Disrupted Family)</td>
<td>-.238</td>
<td>.549</td>
<td>0.788</td>
<td>0.269-2.310</td>
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<tr>
<td></td>
<td>G1FCON32→G2MCON32 (cf. 13 variables)</td>
<td>.192</td>
<td>.554</td>
<td>1.212</td>
<td>0.409-3.587</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001, †p<.10; cf = controlling for; Exp(B) = Partial Odds Ratio; CI = Confidence Interval; G1FCON32 = convictions of G1 females up to age 32; G2MCON32 = convictions of G2 males up to age 32
5.8. Does having a convicted G2 predict convictions of G3 males when controlling for G2 risk factors for G3 male offending? Which risk factors make the G2-G3 relationship nonsignificant? These are possible mediators.

In this analysis, the focus is on G2 parents versus G3 males. As noted earlier, there were 342 G3 males. This left 342 families with a G2 father, a G2 mother and a G3 son who were all searched and at risk of conviction. For comparability, convictions of G3 males up to age 32 were compared with the convictions of G2 parents up to the same age.

G2-G3 male families

Table 5.8.1 (based on Tables 5.3.2 and 5.3.3) shows the percentage of G3 sons who were convicted up to age 32, given convicted or unconvicted G2 parents up to age 32. For example, 39.6% of G3 sons with a convicted G2 father were themselves convicted, compared with 18.7% of G3 sons with an unconvicted G2 father. 64.5% of G3 sons with a convicted G2 mother were themselves convicted, compared with 23.5% of G3 sons with an unconvicted G2 mother. Convictions of G2 parents significantly predicted convictions of G3 sons.

<table>
<thead>
<tr>
<th></th>
<th>Convicted G2</th>
<th>Unconvicted G2</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>G2 father</td>
<td>55 (39.6%)</td>
<td>38 (18.7%)</td>
<td>2.843</td>
<td>1.742-4.640</td>
</tr>
<tr>
<td>G2 mother</td>
<td>20 (64.5%)</td>
<td>73 (23.5%)</td>
<td>5.928</td>
<td>2.714-12.945</td>
</tr>
</tbody>
</table>

*OR odds ratio, CI 95% confidence interval*

I then decided to examine whether convictions of G2 parents had a direct effect or an indirect effect on convictions of G3 males. I examined variables which were possible mediators of the effect. Here I used G2 risk factors for G3 male offending up to age 32, which were dichotomized, as far as possible, into the “worst” quarter versus the remainder (see Farrington & Loeber, 2000).

The G2 risk factors for offending by the G3 offending used in this section include six parental risk factors (authoritarian G2 father at 32, authoritarian G2 mother at 32, young G2
father, young G2 mother, depressed G2 father at 32, depressed G2 mother at 48), eight family risk factors (uninvolved G2 father at 32, physical punishment at 32, physical punishment from G3, poor supervision at 32, poor supervision from G3, parental conflict at 32, separated from child at 32, separated from child from G3), four socio-economic risk factors (low take-home pay at 32, large family size at 32, poor housing at 32, low social class at 32), two attainment risk factors (early school leaving from G3, No A level from G3), two impulsiveness risk factors (risk taking under 12 from G3, poor attention at school from G3), and two behavioural risk factors (suspended from school from G3, frequent truant from G3). The description below provides more information on each of these risk factors. For more information about these G2 risk factors, see Farrington et al. (2015).

5.8.1. Mediation analysis (G2M-G3M)

I examined whether the predictive power of convictions of G2 males on convictions of G3 males decreased after controlling for the above 24 possible mediating factors.

Table 5.8.2 shows the four steps suggested by Baron and Kenny (1986) with regard to the possible mediating factors of the effect of convictions of G2 males up to age 32 on convictions of G3 males up to age 32. In Step 1, I found (as previously) that convictions of G2 males up to age 32 significantly predicted convictions of G3 males up to age 32 (OR=2.843, CI=1.742-4.640). In Step 2, I found that convictions of G2 males up to age 32 significantly predicted three parental risk factors (young G2 father, young G2 mother, depressed G2 mother at 48), four family risk factors (physical punishment at 32, physical punishment from G3, separated from child at 32, separated from child from G3), two socio-economic risk factors (low take-home pay at 32, large family size at 32), one attainment risk factor (no A level from G3), one impulsiveness risk factor (risk taking under 12 from G3), and one behavioural risk factor (suspended from school from G3). In Step 3, one parental risk factor (young G2 mother) significantly predicted convictions of G3 males up to age 32, as did two family risk factors (physical punishment from G3, separated from child from G3), two socio-economic risk factors (low take-home pay at 32, large family size), one attainment risk factor (no A level from G3), one impulsiveness risk factor (risk taking under 12 from G3), and one behavioural risk factor (suspended from school from G3). In Step 4, when controlling for all possible mediators independently, the effect of convicted G2 males on convicted G3 males was reduced most by
suspended from school from G3 and no A level from G3. Eight factors satisfied the conditions set out by Baron and Kenny: young G2 mother, physical punishment from G3, separated from child from G3, low take-home pay at 32, large family size, no A level from G3, risk taking under 12 from G3, and suspended from school from G3. When controlling for all 8 of these variables together, the relationship between convicted G2 males and convicted G3 males was reduced to 1.909 but still marginally significant.

Table 5.8.2 shows that the greatest decrease in the OR (from 2.843 to 2.198) occurred after controlling for suspended from school from G3. Adding the other variables in turn, the greatest decrease in the OR (from 2.198 to 1.969) occurred after controlling for suspended school from G3 and no A level from G3. Continuing to add mediators one by one, the most important mediators were suspended from school from G3, no A level from G3, young G2 mother, physical punishment from G3, separated from child from G3, and risk taking under 12. After controlling for all six variables, the relationship between convicted G2 males and convicted G3 males was reduced to 1.787 but still marginally significant (CI=0.934-3.420). Therefore, the effect of convictions of G2 males up to age 32 was mediated by several important variables, especially suspended from school from G3, no A level from G3, young G2 mother, physical punishment from G3, separated from child from G3, and risk taking under 12. Other important mediators were low take-home money and large family size.

**Table 5.8.2**

Possible mediators between convictions of G2 males and convictions of G3 males

<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>G2MCON32→G3MCON32</td>
<td>1.045</td>
<td>.250</td>
<td>2.843</td>
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<tr>
<td>2</td>
<td>Parental</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G2MCON32→Authoritarian G2 Father at 32</td>
<td>-.435</td>
<td>.248</td>
<td>0.647†</td>
<td>0.398-1.052</td>
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<tr>
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<td>G2MCON32→Authoritarian G2 Mother at 32</td>
<td>.375</td>
<td>.278</td>
<td>1.455</td>
<td>0.844-2.510</td>
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<td>G2MCON32→Young G2 Father</td>
<td>1.067</td>
<td>.248</td>
<td>2.905***</td>
<td>1.787-4.724</td>
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<tr>
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<td>G2MCON32→Young G2 Mother</td>
<td>1.226</td>
<td>.273</td>
<td>3.408***</td>
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<td>G2MCON32→Depressed G2 Father at 32</td>
<td>.434</td>
<td>.285</td>
<td>1.543</td>
<td>0.883-2.695</td>
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<td>G2MCON32→Depressed G2 Mother at 48</td>
<td>.675</td>
<td>.316</td>
<td>1.964*</td>
<td>1.057-3.649</td>
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<td>Family</td>
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<td>G2MCON32→Uninvolved G2 Father at 32</td>
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<td>.336</td>
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<td>G2MCON32→Physical Punishment at 32</td>
<td>-.549</td>
<td>.268</td>
<td>0.578*</td>
<td>0.341-0.977</td>
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Table 5.8.2
Possible mediators between convictions of G2 males and convictions of G3 males

<table>
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<tr>
<th>Step</th>
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<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
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<td>G2MCON32→Physical Punishment from G3</td>
<td>.896</td>
<td>.268</td>
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<td>1.450-4.142</td>
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<td>G2MCON32→Poor Supervision at 32</td>
<td>.432</td>
<td>.294</td>
<td>1.541</td>
<td>0.867-2.740</td>
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<td>G2MCON32→Poor Supervision from G3</td>
<td>.480</td>
<td>.251</td>
<td>1.617†</td>
<td>0.988-2.646</td>
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<td>G2MCON32→Parental Conflict at 32</td>
<td>.438</td>
<td>.249</td>
<td>1.550†</td>
<td>0.952-2.523</td>
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<td>G2MCON32→Separated from Child at 32</td>
<td>.739</td>
<td>.274</td>
<td>2.093**</td>
<td>1.223-3.583</td>
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<td>G2MCON32→Separated from Child from G3</td>
<td>.679</td>
<td>.284</td>
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<td>Socio-economic</td>
<td>G2MCON32→Low Take-home Pay at 32</td>
<td>.646</td>
<td>.300</td>
<td>1.908*</td>
<td>1.060-3.435</td>
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<td>G2MCON32→Large Family Size at 32</td>
<td>.717</td>
<td>.251</td>
<td>2.048**</td>
<td>1.251-3.352</td>
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<td>G2MCON32→Poor Housing at 32</td>
<td>.275</td>
<td>.270</td>
<td>1.317</td>
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<td>G2MCON32→Low Social Class at 32</td>
<td>.147</td>
<td>.279</td>
<td>1.159</td>
<td>0.671-2.003</td>
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<td>Attainment</td>
<td>G2MCON32→Early School Leaving from G3</td>
<td>.346</td>
<td>.362</td>
<td>1.414</td>
<td>0.696-2.872</td>
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<td>G2MCON32→No A Level from G3</td>
<td>.973</td>
<td>.290</td>
<td>2.647***</td>
<td>1.500-4.672</td>
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<td>Impulsiveness</td>
<td>G2MCON32→Risk Taking under 12 from G3</td>
<td>.616</td>
<td>.271</td>
<td>1.852*</td>
<td>1.089-3.149</td>
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<td>G2MCON32→Poor Attention at School from G3</td>
<td>.222</td>
<td>.364</td>
<td>1.248</td>
<td>0.612-2.546</td>
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<td>Behaviour</td>
<td>G2MCON32→Suspended from School from G3</td>
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<td>.276</td>
<td>2.455***</td>
<td>1.429-4.218</td>
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<td>G2MCON32→Frequent Truant from G3</td>
<td>.400</td>
<td>.292</td>
<td>1.492</td>
<td>0.842-2.642</td>
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<tr>
<td>Parental</td>
<td>Young G2 Father→G3MCON32</td>
<td>.411</td>
<td>.262</td>
<td>1.508</td>
<td>0.902-2.521</td>
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<tr>
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<td>Young G2 Mother→G3MCON32</td>
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<td>.279</td>
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<td>Physical Punishment from G3→G3MCON32</td>
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<td>Separated from Child at 32→G3MCON32</td>
<td>.400</td>
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<td>0.847-2.628</td>
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<td>Separated from Child from G3→G3MCON32</td>
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<td>.990</td>
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**Table 5.8.2**

Possible mediators between convictions of G2 males and convictions of G3 males

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<th>95% CI</th>
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<td>No A Level from G3→G3MCON32</td>
<td>1.315</td>
<td>.357</td>
<td>3.727***</td>
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<td>Impulsiveness</td>
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<td>Risk Taking under 12 from G3→G3MCON32</td>
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<td>Suspended from School from G3→G3MCON32</td>
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<td>3.114-10.033</td>
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<td>G2MCON32→G3MCON32</td>
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<td>(cf. Large Family Size)</td>
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<tr>
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<td>G2MCON32→G3MCON32</td>
<td>.678</td>
<td>.305</td>
<td>1.969*</td>
<td>1.084-3.578</td>
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### Table 5.8.2
Possible mediators between convictions of G2 males and convictions of G3 males

<table>
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<tr>
<th>Step</th>
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<th>Exp(B)</th>
<th>95% CI</th>
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<td>(cf. Suspended from School from G3, No A Level from G3)</td>
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<td>1.835†</td>
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<tr>
<td>2</td>
<td>G2MCON32→G3MCON32</td>
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<td>.328</td>
<td>1.809†</td>
<td>0.951-3.440</td>
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<td>(cf. Suspended from School from G3, No A Level from G3, Young G2 Mother, Physical Punishment from G3)</td>
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<tr>
<td>3</td>
<td>G2MCON32→G3MCON32</td>
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<td>1.792†</td>
<td>0.937-3.427</td>
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<tr>
<td>4</td>
<td>G2MCON32→G3MCON32</td>
<td>.581</td>
<td>.331</td>
<td>1.787†</td>
<td>0.934-3.420</td>
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<td>5</td>
<td>G2MCON32→G3MCON32 (cf. 8 variables)</td>
<td>.647</td>
<td>.379</td>
<td>1.909†</td>
<td>0.907-4.016</td>
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*p<.05, **p<.01, ***p<.001, †p<.10; cf = controlling for; Exp(B) = Partial Odds Ratio; CI = Confidence Interval; G2MCON32 = convictions of G2 males up to age 32; G3MCON32 = convictions of G3 males up to age 32

#### 5.8.2. Mediation analysis (G2F-G3M)

I examined whether the predictive power of convictions of G2 females on convictions of G3 males decreased after controlling for the above 24 possible mediating factors. Table 5.8.3 shows the four steps suggested by Baron and Kenny (1986) with regard to the possible mediators of the effect of convictions of G2 females up to age 32 on convictions of G3 males up to age 32. In Step 1, I found (as previously) that convictions of G2 females up to age 32 significantly predicted convictions of G3 males up to age 32 (OR=5.928, CI=2.714-12.945). In
Step 2, I found that convictions of G2 females up to age 32 significantly predicted two parental risk factors (young G2 father, young G2 mother), three family risk factors (physical punishment at 32, physical punishment from G3, separated from child at 32), three socio-economic risk factors (low take-home pay at 32, large family size at 32, poor housing at 32), two attainment risk factors (early school leaving from G3, no A level from G3), two impulsiveness risk factors (risk taking under 12 from G3, poor attention at school from G3), and two behavioural risk factors (suspended from school from G3, frequent truant from G3). In Step 3, one family risk factor (young G2 mother) significantly predicted convictions of G3 males up to age 32, as did one family risk factor (physical punishment from G3), three socio-economic risk factors (low take-home pay at 32, large family size at 32, poor housing at 32), two attainment risk factors (early school leaving from G3, no A level from G3), one impulsiveness risk factor (risk taking under 12 from G3), and two behavioural risk factors (suspended from school from G3, frequent truant from G3). In Step 4, when controlling for possible mediators independently, the effect of convicted G2 females on convicted G3 males was reduced most by low take-home pay at 32 and large family size at 32. Seven factors satisfied the conditions set out by Baron and Kenny: young G2 mother, low take-home pay at 32, early school leaving from G3, no A level from G3, suspended from school from G3, and frequent truant from G3. It was interesting that the relationship between convicted G2 females and convicted G3 males became stronger after controlling for the following factors independently: physical punishment from G3, poor housing at 32, and risk taking under 12 from G3. When controlling for all 7 of these variables together, convictions of G2 females up to age 32 did not predict convictions of G3 males up to age 32, with the OR decreasing from 5.928 to 1.958 (CI=0.540-7.109).

Table 5.8.3 shows that the greatest decrease in the OR (from 5.928 to 3.347) occurred after controlling for low take-home pay at 32. Adding the other variables in turn, the greatest decrease in the OR (from 3.347 to 2.801) occurred after controlling for low take-home pay at 32 and suspended from school from G3. Continuing to add mediators one by one, the most important mediators were low take-home pay at 32, suspended from school from G3, early school leaving from G3, young G2 mother, frequent truant, and no A level from G3. After controlling for all six variables, the relationship between convicted G2 females and convicted G3 males was reduced to 1.935 and became nonsignificant (CI=0.544-6.878). Therefore, the effect of convictions of G2 females up to age 32 was mediated by several important variables, especially low take-home pay at 32, suspended from school from G3, early school leaving from
G3, young G2 mother, frequent truant, and no A level from G3. Other important mediator was large family size at 32.

**Table 5.8.3**
Possible mediators between convictions of G2 females and convictions of G3 males

<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
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<tr>
<td>1</td>
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<td>1.780</td>
<td>.399</td>
<td>5.928***</td>
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<tr>
<td>G2FCON32→Authoritarian G2 Father at 32</td>
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<tr>
<td>G2FCON32→Authoritarian G2 Mother at 32</td>
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<tr>
<td>G2FCON32→Young G2 Father</td>
</tr>
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<td>G2FCON32→Young G2 Mother</td>
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<td>G2FCON32→Depressed G2 Father at 32</td>
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<td>G2FCON32→Depressed G2 Mother at 48</td>
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<td>G2FCON32→Physical Punishment at 32</td>
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<td>G2FCON32→Poor Supervision at 32</td>
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<td>G2FCON32→Parental Conflict at 32</td>
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<td>G2FCON32→Separated from Child at 32</td>
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<td>G2FCON32→Separated from Child from G3</td>
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<td>G2FCON32→Low Take-home Pay at 32</td>
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<td>G2FCON32→Large Family Size at 32</td>
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<tr>
<td>G2FCON32→Poor Housing at 32</td>
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<td>G2FCON32→Low Social Class at 32</td>
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<td>G2FCON32→No A Level from G3</td>
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<td>G2FCON32→Poor Attention at School from G3</td>
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## Table 5.8.3
Possible mediators between convictions of G2 females and convictions of G3 males

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<td>Early School Leaving from G3→G3MCON32</td>
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<td>No A Level from G3→G3MCON32</td>
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<td>Suspended from School from G3→G3MCON32</td>
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<td>Frequent Truant from G3→G3MCON32</td>
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<td>G2FCON32→G3MCON32 (cf. Young G2 Mother)</td>
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### Table 5.8.3
Possible mediators between convictions of G2 females and convictions of G3 males

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<td><strong>Socio-economic</strong></td>
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<tr>
<td>(cf. Low Take-home Pay at 32)</td>
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<tr>
<td>G2FCON32→G3MCON32</td>
<td>1.600</td>
<td>.411</td>
<td>4.953***</td>
<td>2.214-11.080</td>
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<tr>
<td>(cf. Large Family Size at 32)</td>
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<td>G2FCON32→G3MCON32</td>
<td>2.226</td>
<td>.590</td>
<td>9.262***</td>
<td>2.916-29.420</td>
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<tr>
<td>(cf. Poor Housing at 32)</td>
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<td>G2FCON32→G3MCON32</td>
<td>1.670</td>
<td>.536</td>
<td>5.314**</td>
<td>1.857-15.206</td>
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<td>(cf. Early School Leaving from G3)</td>
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<tr>
<td>G2FCON32→G3MCON32</td>
<td>1.692</td>
<td>.523</td>
<td>5.429***</td>
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<td>(cf. No A Level from G3)</td>
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<td><strong>Impulsiveness</strong></td>
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<tr>
<td>G2FCON32→G3MCON32</td>
<td>1.781</td>
<td>.525</td>
<td>5.936***</td>
<td>2.119-16.624</td>
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<tr>
<td>(cf. Risk Taking under 12 from G3)</td>
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<tr>
<td><strong>Behaviour</strong></td>
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<tr>
<td>G2FCON32→G3MCON32</td>
<td>1.666</td>
<td>.552</td>
<td>5.289**</td>
<td>1.793-15.606</td>
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<tr>
<td>(cf. Suspended from School from G3)</td>
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<tr>
<td>G2FCON32→G3MCON32</td>
<td>1.666</td>
<td>.533</td>
<td>5.292**</td>
<td>1.862-15.045</td>
<td></td>
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<tr>
<td>(cf. Frequent Truant from G3)</td>
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</tr>
<tr>
<td>G2FCON32→G3MCON32</td>
<td>1.030</td>
<td>.618</td>
<td>2.802†</td>
<td>0.834-9.415</td>
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<tr>
<td>(cf. Low Take-home Pay at 32, Suspended from School from G3)</td>
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<tr>
<td>G2FCON32→G3MCON32</td>
<td>.830</td>
<td>.641</td>
<td>2.294</td>
<td>0.654-8.052</td>
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</tr>
<tr>
<td>(cf. Low Take-home Pay at 32, Suspended from School from G3, Early School Leaving from G3)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>G2FCON32→G3MCON32</td>
<td>.740</td>
<td>.649</td>
<td>2.096</td>
<td>0.588-7.475</td>
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</table>
### 5.8.3. Mediation analysis (G2F-G3F)

I examined whether the predictive power of convictions of G2 females on convictions of G3 females decreased after controlling for the above 24 possible mediating factors. Table 5.8.4 shows the four steps suggested by Baron and Kenny (1986) with regard to the possible mediators of the effect of convictions of G2 females up to age 32 on convictions of G3 females up to age 32. In Step 1, I found (as previously) that convictions of G2 females up to age 32 significantly predicted convictions of G3 females up to age 32 (OR=2.987, CI=1.166-7.647). In Step 2, I found that convictions of G2 females up to age 32 significantly predicted three parental risk factors (authoritarian G2 mother at 32, young G2 father, young G2 mother), two family risk factors (separated from child at 32, separated from child from G3), three socio-economic risk factors (low take-home pay at 32, large family size at 32, poor housing at 32),

<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(cf. Low Take-home Pay at 32, Suspended from School from G3, Early School Leaving from G3, Young G2 Mother)</td>
<td>0.695</td>
<td>0.648</td>
<td>2.003</td>
<td>0.563-7.130</td>
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<tr>
<td></td>
<td>G2FCON32→G3MCON32</td>
<td>0.660</td>
<td>0.647</td>
<td>1.935</td>
<td>0.544-6.878</td>
</tr>
<tr>
<td></td>
<td>(cf. Low Take-home Pay at 32, Suspended from School from G3, Early School Leaving from G3, Young G2 Mother, Frequent Truant from G3)</td>
<td>0.672</td>
<td>0.658</td>
<td>1.958</td>
<td>0.540-7.109</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001, †p<.10; cf = controlling for; Exp(B) = Partial Odds Ratio; CI = Confidence Interval; G2FCON32 = convictions of G2 females up to age 32; G3MCON32 = convictions of G3 males up to age 32
two attainment risk factors (early school leaving from G3, no A level from G3), two impulsiveness risk factors (risk taking under 12 from G3, poor attention at school from G3), and two behavioural risk factors (suspended from school from G3, frequent truant from G3). In Step 3, two family risk factors (separated from child at 32, separated from child from G3) significantly predicted convictions of G3 females up to age 32. In Step 4, when controlling for possible mediators independently, the effect of convicted G2 females on convicted G3 females was reduced by separated from child from G3. Only one factor satisfied the conditions set out by Baron and Kenny: separated from child from G3. It was interesting that the relationship between convicted G2 females and convicted G3 females became stronger after controlling for separated from child at 32. When controlling for the two variables together, convictions of G2 females up to age 32 did not predict convictions of G3 females up to age 32, with the OR decreasing from 2.987 to 2.218 (CI=0.558-8.812). Table 8.4 shows that after controlling for separated from child at 32, the relationship between convicted G2 females and convicted G3 females was reduced to 2.637 and became nonsignificant (CI=0.714-9.739). Therefore, the effect of convictions of G2 females up to age 32 was mediated by one variable: separated from child from G3.

### Table 5.8.4

Possible mediators between convictions of G2 females and convictions of G3 females

<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>G2CON32→G3CON32</td>
<td>1.094</td>
<td>.480</td>
<td>2.987*</td>
<td>1.166-7.647</td>
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<tr>
<td>2</td>
<td>Parental</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>G2CON32→Authoritarian G2 Father at 32</td>
<td>-.768</td>
<td>.569</td>
<td>.464</td>
<td>0.152-1.415</td>
</tr>
<tr>
<td></td>
<td>G2CON32→Authoritarian G2 Mother at 32</td>
<td>1.403</td>
<td>.673</td>
<td>4.066*</td>
<td>1.088-15.200</td>
</tr>
<tr>
<td></td>
<td>G2CON32→Young G2 Father</td>
<td>1.717</td>
<td>.470</td>
<td>5.569***</td>
<td>2.216-13.998</td>
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<tr>
<td></td>
<td>G2CON32→Young G2 Mother</td>
<td>1.250</td>
<td>.441</td>
<td>3.490**</td>
<td>1.472-8.278</td>
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<tr>
<td></td>
<td>G2CON32→Depressed G2 Father at 32</td>
<td>.071</td>
<td>.500</td>
<td>1.074</td>
<td>0.403-2.863</td>
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<td>G2CON32→Depressed G2 Mother at 48</td>
<td>1.635</td>
<td>1.138</td>
<td>5.128</td>
<td>0.551-47.737</td>
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<tr>
<td></td>
<td>Family</td>
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<tr>
<td></td>
<td>G2CON32→Uninvolved G2 Father at 32</td>
<td>.751</td>
<td>.554</td>
<td>2.119</td>
<td>0.716-6.274</td>
</tr>
<tr>
<td></td>
<td>G2CON32→Physical Punishment at 32</td>
<td>-.933</td>
<td>.591</td>
<td>0.393</td>
<td>0.123-1.254</td>
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<tr>
<td></td>
<td>G2CON32→Physical Punishment from G3</td>
<td>.683</td>
<td>.503</td>
<td>1.980</td>
<td>0.739-5.305</td>
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<tr>
<td></td>
<td>G2CON32→Poor Supervision at 32</td>
<td>.118</td>
<td>.571</td>
<td>1.125</td>
<td>0.367-3.445</td>
</tr>
<tr>
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<td>G2CON32→Poor Supervision from G3</td>
<td>.228</td>
<td>.488</td>
<td>1.256</td>
<td>0.482-3.271</td>
</tr>
</tbody>
</table>
### Table 5.8.4
Possible mediators between convictions of G2 females and convictions of G3 females

<table>
<thead>
<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
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<tbody>
<tr>
<td>1</td>
<td>G2FCON32→Parental Conflict at 32</td>
<td>.684</td>
<td>.500</td>
<td>1.982</td>
<td>0.744-5.276</td>
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<tr>
<td></td>
<td>G2FCON32→Separated from Child at 32</td>
<td>1.341</td>
<td>.437</td>
<td>3.824**</td>
<td>1.624-9.004</td>
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<tr>
<td></td>
<td>G2FCON32→Separated from Child from G3</td>
<td>.825</td>
<td>.495</td>
<td>2.283†</td>
<td>0.865-6.024</td>
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<td>2</td>
<td>Socio-economic</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>G2FCON32→Low Take-home Pay at 32</td>
<td>1.025</td>
<td>.557</td>
<td>2.786†</td>
<td>0.935-8.297</td>
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<tr>
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<td>G2FCON32→Large Family Size at 32</td>
<td>.852</td>
<td>.427</td>
<td>2.344*</td>
<td>1.015-5.412</td>
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<td>G2FCON32→Poor Housing at 32</td>
<td>1.522</td>
<td>.653</td>
<td>4.583*</td>
<td>1.276-16.466</td>
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<tr>
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<td>G2FCON32→Low Social Class at 32</td>
<td>.405</td>
<td>.508</td>
<td>1.500</td>
<td>0.554-4.060</td>
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<td>Attainment</td>
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<tr>
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<td>G2FCON32→Early School Leaving from G3</td>
<td>1.776</td>
<td>.535</td>
<td>5.909***</td>
<td>2.071-16.858</td>
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<td>G2FCON32→No A Level from G3</td>
<td>1.941</td>
<td>1.044</td>
<td>6.962†</td>
<td>0.900-53.849</td>
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<td>Impulsiveness</td>
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<td>G2FCON32→Risk Taking under 12 from G3</td>
<td>1.592</td>
<td>.525</td>
<td>4.911**</td>
<td>1.755-13.742</td>
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<td>G2FCON32→Poor Attention at School from G3</td>
<td>1.743</td>
<td>.519</td>
<td>5.715***</td>
<td>2.068-15.794</td>
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<td>G2FCON32→Suspended from School from G3</td>
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<td>.512</td>
<td>4.917**</td>
<td>1.804-13.402</td>
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<td>G2FCON32→Frequent Truant from G3</td>
<td>1.174</td>
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<td>3.234*</td>
<td>1.211-8.636</td>
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<td>Authoritarian G2 Mother at 32→G3FCON32</td>
<td>-.221</td>
<td>.837</td>
<td>0.802</td>
<td>0.155-4.133</td>
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<td>Young G2 Father→G3FCON32</td>
<td>.296</td>
<td>.498</td>
<td>1.345</td>
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<td>Young G2 Mother→G3FCON32</td>
<td>.744</td>
<td>.498</td>
<td>2.103</td>
<td>0.793-5.579</td>
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<td>Separated from Child at 32→G3FCON32</td>
<td>1.116</td>
<td>.519</td>
<td>3.054*</td>
<td>1.105-8.444</td>
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<td>Separated from Child from G3→G3FCON32</td>
<td>1.374</td>
<td>.558</td>
<td>3.951*</td>
<td>1.323-11.796</td>
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<td>8</td>
<td>Socio-economic</td>
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<td></td>
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<tr>
<td></td>
<td>Low Take-home Pay at 32→G3FCON32</td>
<td>.550</td>
<td>.625</td>
<td>1.733</td>
<td>0.509-5.904</td>
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<td>Large Family Size at 32→G3FCON32</td>
<td>.338</td>
<td>.509</td>
<td>1.402</td>
<td>0.517-3.803</td>
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<td>Poor Housing at 32→G3FCON32</td>
<td>.716</td>
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<td>2.045</td>
<td>0.593-7.051</td>
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<td>9</td>
<td>Attainment</td>
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211
Table 5.8.4  
Possible mediators between convictions of G2 females and convictions of G3 females

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<tr>
<th>Step</th>
<th>Risk factor</th>
<th>B</th>
<th>SE</th>
<th>Exp(B)</th>
<th>95% CI</th>
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<tbody>
<tr>
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<td>Early School Leaving from G3→G3FCON32</td>
<td>-.111</td>
<td>.794</td>
<td>0.895</td>
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<td>No A Level from G3→G3FCON32</td>
<td>-.078</td>
<td>.613</td>
<td>0.925</td>
<td>0.278-3.076</td>
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<td><strong>Impulsiveness</strong></td>
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<td></td>
</tr>
<tr>
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<td>Risk Taking under 12 from G3→G3FCON32</td>
<td>.540</td>
<td>.545</td>
<td>1.716</td>
<td>0.589-4.997</td>
</tr>
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<td>Poor Attention at School from G3→G3FCON32</td>
<td>-.347</td>
<td>.789</td>
<td>0.707</td>
<td>0.151-3.315</td>
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<td><strong>Behaviour</strong></td>
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<td>Suspended from School from G3→G3FCON32</td>
<td>.483</td>
<td>.557</td>
<td>1.621</td>
<td>0.545-4.827</td>
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<td>Frequent Truant from G3→G3FCON32</td>
<td>.793</td>
<td>.561</td>
<td>2.210</td>
<td>0.736-6.638</td>
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<td><strong>Family</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
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<td>G2FCON32→G3FCON32 (cf. Separated from Child at 32)</td>
<td>1.184</td>
<td>.586</td>
<td>3.268*</td>
<td>1.036-10.305</td>
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<tr>
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<td>G2FCON32→G3FCON32 (cf. Separated from Child from G3)</td>
<td>.970</td>
<td>.667</td>
<td>2.637</td>
<td>0.714-9.739</td>
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<tr>
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<td>G2FCON32→G3FCON32 (cf. Separated from Child at 32, Separated from Child from G3)</td>
<td>.796</td>
<td>.704</td>
<td>2.218</td>
<td>0.558-8.812</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001, †p<.10; cf = controlling for; Exp(B) = Partial Odds Ratio; CI = Confidence Interval; G2FCON32 = convictions of G2 females up to age 32; G3FCON32 = convictions of G3 females up to age 32.
Chapter 6

Discussion

There has been considerable interest in investigating the association between criminal behaviour of parents and that of their children. The findings derived from these studies have shown that criminal parents tend to have criminal children (Bijleveld & Wijkman, 2009; Farrington et al., 2009; Rowe & Farrington, 2006; Thornberry, 2005). Much of the research examining this familial transmission has involved retrospective searches of criminal behaviour of retrospectively defined samples. In some longitudinal prospective studies, only two generations were followed prospectively, with a focus on fathers and sons to the exclusion of mothers and daughters. Moreover, although previous research documents this association, work remains to be carried out on identifying the possible factors and mechanisms that come to play in this transmission.

This thesis was designed to address these gaps in the literature by using a large sample of 411 males, their parents and eventually their children – for three generations, with prospectively gathered data from the Cambridge Study in Delinquent Development (CSDD). Moreover, in addition to simply establishing the strength of intergenerational continuity in criminal behaviour across three generations, this thesis also sought to shed some light on the underlying mechanisms that generate these associations.

6.1 Statistical analyses

The main aim of the statistical analyses was to study the intergenerational transmission of convictions based on convictions up to age 32 for all the study males (G2), their parents (G1), and their children (G3). These analyses described the transmission from G1 father to G2 male (G1M-G2M), from G1 mother to G2 male (G1F-G2M), from G2 male to G3 son (G2M-G3M), from G2 female to G3 son (G2F-G3M), from G2 male to G3 daughters (G2M-G3F), from G2 female to G3 daughter (G2F-G3F), from G1 grandfather to G3 grandson (G1M-G3M), from G1 grandmother to G3 grandson (G1F-G3M), from G1 grandfather to G3 granddaughter (G1M-G3F), and from G1 grandmother to G3 granddaughter (G1F-G3F). The basic findings
of the statistical analyses confirm the findings of previous studies, which have shown that criminal behaviour in one generation increased the risk of criminal behaviour in the subsequent generation (Farrington et al., 2009; Farrington et al., 2001; Kim et al., 2009; Thornberry et al., 2003, 2006). The statistical analyses have extended these findings by (1) exploring the possibility of gender-specific intergenerational transmission processes, with the inclusion of both fathers and mothers and both sons and daughters; (2) examining the importance of environmental influences on the effect of parental criminality by comparing children who have been separated from their parents with children who have not; and (3) focusing attention on several important childhood risk factors (measured at ages 8-10) as likely mediators of intergenerational transmission.

**Continuity from G1 to G2**

The G1-G2 analyses revealed a strong intergenerational transmission of convictions from G1 fathers to G2 sons and from G1 mothers to G2 sons. Convictions of G1 fathers (OR=4.651) and G1 mothers (OR=3.305) up to age 32 significantly predicted convictions of G2 sons up to age 32. Examinations of the intergenerational transmission of convictions from G1 parents to G2 sons found some evidence that the strongest relationship was for the same-sex intergenerational dyads of fathers and sons. This may be because children adopt gender roles from their parents and tend to unconsciously identify with a parent who is of the same sex, making it more likely that they follow the behavioural patterns of their same-sex parent (Bussey & Bandura, 1984). This finding provides some support for a possible modelling effect between same-sex intergenerational dyads, as with other studies showing stronger same-sex relationships between generations (Auty et al., 2017; Farrington et al., 1996; Farrington et al., 2009; Farrington & Crago, 2016; Jahanshahi et al., 2021; Rowe & Farrington, 2006; Thornberry et al., 2003; Tzoumakis et al., 2020).

Additional analyses revealed that intergenerational transmission effects were stronger for G2 sons who had not been separated from their G1 fathers before age 10, compared with G2 sons who had been separated. Convicted G1 fathers appeared to significantly contribute to convictions for both separated and unseparated G2 sons, but unseparated G2 sons had a significantly greater chance of convictions (OR=4.987) than separated G2 sons (OR=2.414). Similarly, convicted G1 mothers did not predict convictions for separated G2 sons (OR=0.923),
but only for unseparated G2 sons (OR=5.587). Therefore, the influences of G1 parents may be mainly environmental rather than genetic. Farrington and Crago (2016) also found that the transmission of crime was stronger when children had not been separated from their fathers, suggesting that environmental influences were important. The results provide support for the importance of environmental influences in the transmission from parents to children. Moreover, there was a significant interaction between convictions of G1 mothers and separation from a G1 parent before age 10 in predicting convictions of G2 sons, such that G2 sons who had a convicted mother but who had also been separated were less likely to be convicted than those who had a convicted mother but had not been separated. This is congruent with prior research suggesting that the presence of antisocial parents may provide some environmental influences leading to a greater likelihood of their children becoming criminal (Farrington & Crago, 2016; Jaffee et al., 2003; Van de Weijer et al., 2015). It can therefore be assumed that being separated from a G1 parent before age 10 may play a role in potentially having a protective influence on the transfer of criminality from mothers to their sons. On the other hand, no significant interaction effect was observed between convictions of G1 fathers and separation from a G1 parent in predicting convictions of G2 sons. Instead, the effects appeared to be additive, indicating that convictions of G1 fathers and separation both acted as risk factors. Therefore, sons who had a convicted father and who also had been separated are exposed to at least two main risk factors for criminal development: having a convicted parent and experiencing parental separation. This finding is in line with earlier research showing that parental separation or divorce may increase offspring’s risk for criminal behaviour, possibly because of fewer economic and social resources available to offspring (McLanahan & Sandefur, 2009), weaker attachments to parents (Hirschi, 2017), or lower levels of parental supervision (Sampson & Laub, 1990, 1993).

The next question was to what extent the intergenerational transmission of convictions from G1 parents to G2 sons was mediated by age 8-10 G1 risk factors. The degree of intergenerational transmission of convictions from G1 fathers to G2 sons was found to reduce after controlling for several important mediators, especially disrupted family, poor supervision, large family size, low nonverbal IQ, parental conflict, high daring, poor housing, high troublesomeness, high impulsivity, and low verbal IQ. The effects of convicted G1 fathers on convicted G2 sons remained significant even after controlling for these risk factors. This led to the conclusion that a part of the association between convictions of G1 fathers and convictions
of G2 sons may be mediated by disrupted family, poor supervision, large family size, low nonverbal IQ, parental conflict, high daring, poor housing, high troublesomeness, high impulsivity, and low verbal IQ. This conclusion is very similar to what has been found before in the CSDD analyses (Auty et al., 2017; Farrington et al., 2017, 2018; Smith & Farrington, 2004; West & Farrington, 1977), as well as in several other studies (Capaldi et al., 2003; Hjalmarsson & Lindquist, 2012; Sampson & Laub, 1993).

Convictions of G1 mothers did not have a significant influence on convictions of G2 sons, when G2 sons’ high dishonesty was taken into consideration. It may be that the G1 mother’s criminal behaviour contributed to their G2 son’s development of maladaptive behaviours such as dishonesty, which in turn increased the risk that the G2 sons will also develop criminal behaviour. It is thus likely that the association between convictions of G1 mothers and convictions of G2 sons is at least partially due to the G2 son’s high dishonesty. Another possibility is that high dishonesty and criminal behaviour are reflecting the same underlying construct. The degree of intergenerational transmission of convictions from G1 mothers to G2 sons decreased after controlling for other risk factors, such as low attainment, poor supervision, poor housing, large family size, high troublesomeness, low non-verbal IQ, and disrupted family, which is suggestive of partial mediation through several childhood risk factors. This finding supports evidence from previous studies that indicate the transmission of criminal behaviour is indirect and occurs through mediating factors (Bailey et al., 2009; Capaldi et al., 2003; Jaffee et al., 2001; Kaplan & Liu, 1999b; Sampson & Laub, 1993; Thornberry, 2005; West & Farrington, 1977). Overall, the results of the mediation analyses suggest, that while the G1 father’s conviction is both directly and indirectly, via unstable family environments and/or negative childhood temperament problems, related to the G2 son’s conviction, the G1 mother’s conviction has only an indirect effect on the G2 son’s conviction that is mediated by some childhood risk factors, and the primary pathway is the G2’s high dishonesty. These results are in line with the findings of Thornberry and colleagues (2003), who observed different transmission pathways among mothers and fathers.

**Continuity from G2 to G3**

The results from the G2-G3 analyses revealed a strong intergenerational transmission of convictions from G2 parents to G3 children, except in the case of the relationship between
G2 fathers and G3 daughters. Possibly because of the small number of convicted G3 daughters, convictions of G2 fathers did not significantly predict convictions of G3 daughters (p=.100). This finding is somewhat contrary to that of Auty et al. (2021), who found a strong transmission from fathers to daughters, although her analyses concerned personality disorder rather than offending. As found in prior research (Farrington & Crago, 2016), the strength of intergenerational transmission was not similar between G1 parents and G2 sons and between G2 parents and G3 children. While the G2 mother-G3 son relationship (OR=5.928) was clearly stronger than the G1 mother-G2 son relationship (OR=3.305), the G2 father-G3 son relationship (OR=2.843) was clearly weaker than the G1 father-G2 son relationship (OR=4.651). Contrary to what was found in the G1-G2 analyses and in prior research (Farrington et al., 2009; Rowe & Farrington, 2006), I did not find strong evidence that intergenerational transmission is stronger for same-sex relationships. Interestingly, the transmission was strongest from G2 mothers to G3 sons (OR=5.928), then from G2 mothers to G3 daughters (OR=2.987), then from G2 fathers to G3 sons (OR=2.843), and then weakest from G2 fathers to G3 daughters (OR=1.983). Analyses indicated that maternal transmission of criminal behaviour to children was strongest, regardless of children’s gender. This is consistent with other studies showing stronger maternal than paternal transmission of criminal behaviour (Besemer et al., 2017; Jahanshahi et al., 2021; Mednick et al., 1987; Robins et al., 1975; Tzoumakis et al., 2020). This could be for reasons previously mentioned such as women being often the main caregivers for children and spending much of their time with children (Ehrensaft, 2018; Moffitt et al., 2001), thus having a greater chance of transmitting risks of criminal behaviour to children (Gaalen & Besjes, 2018).

Contrary to what was found in the G1-G2 analyses, the intergenerational transmission effects were not stronger for G3 children who had not been separated before age 15. The degree of G2 paternal transmission was very similar between separated G3 sons (OR=2.709) and unseparated G3 sons (OR=2.690). This finding echoes that of Farrington and colleagues (2017), who found that the degree of continuity in criminal behaviour did not vary much depending on whether or not the boy had been separated. Moreover, the degree of G2 maternal transmission was much greater for separated G3 sons (OR=13.000) than for unseparated G3 sons (OR=6.400). These findings suggest that the influences of the G2 parents may be mainly genetic influences. However, with a small sample size of convicted G2 mothers, caution must be applied.
On the other hand, the degree of G2 maternal transmission was greater for unseparated G3 daughters (OR=4.841) than for separated G3 daughters (OR=1.917). It is likely that environmental influences play a significant role in the transmission from G2 mothers to G3 daughters. No significant interaction effect was observed between convictions of G2 parents and separation from a G2 father before age 15 in predicting convictions of G3 children. Rather, convictions of G2 parents and separation from a G2 father appeared to have additive effects in predicting convictions of G3 sons. They both acted as risk factors, and it was the combination of two risk factors that ultimately influenced the G3 son’s criminal behaviour. Overall, the results found some evidence of different intergenerational pathways for G3 sons and G3 daughters. For G3 sons, genetic factors appear more likely to explain the parents’ influence, whereas, for G3 daughters, the parents’ influence is likely to be mainly attributable to the effects of environmental factors. This finding is in line with the results of Auty and colleagues (2017), who found that environmental risk factors could partly account for the transmission of parents’ criminal behaviour to children, especially to female children.

To what extent, then, was the intergenerational transmission of convictions from G2 parents to G3 children mediated by age 8-10 G2 risk factors. It was found that the degree of intergenerational transmission of convictions from G2 fathers to G3 sons was reduced after controlling for several important factors, especially suspended from school (from G3), no A level (from G3), young G2 mother, physical punishment (from G3), separated from child (from G3), and risk taking under 12, suggesting that these factors may be links in the chain between convicted G2 fathers and convicted G3 sons. The effect of convicted G2 fathers remained marginally significant after controlling for these risk factors. Therefore, it is likely that convicted G2 fathers had a direct effect on their G3 son’s convictions, but this association also seemed to be mediated via the G3 sons’ suspension from school, risk-taking behaviours, low educational attainments, and other negative childhood experiences, such as parental separation and physical punishment.

On the other hand, the degree of intergenerational transmission of convictions from G2 mothers to G3 sons was reduced to insignificance after controlling for low take-home pay at 32, suspended from school (from G3), and early school leaving (from G3). It is therefore likely that the transmission from G2 mothers to G3 sons may be explained through an indirect mediation of risk factors, such as a low-income family and poor school performances of the G3 sons. Moreover, the degree of intergenerational transmission from G2 mothers to G3
daughters was reduced to insignificance once separation from G3 was taken into consideration. This finding suggests that separation from a G2 mother before age 15 may contribute to the G3 daughters’ vulnerabilities to convictions which go beyond the risk posed by having a convicted G2 mother. Overall, the results of the mediation analyses suggest that convicted G2 fathers have both direct and indirect effects, via child behavioural problems and poor school performances and/or negative childhood experiences, on their G3 son’s conviction. However, convicted G2 mothers have only an indirect effect on their G3 son’s convictions that is mediated by low-income family and poor school performances of the G3 sons.

The results confirm the existence of different mechanisms for G3 sons and G3 daughters. For G3 sons, the transmission could be explained by some risk factors associated with their externalising and academic problems. It may be that the stress associated with parental criminal behaviour may have causal effects on the sons’ externalising and academic problems and convictions. This is in line with the notion that boys are more susceptible to negative life events such as parental criminal behaviour (Rutter et al., 2003) and thus tend to display more externalising problem behaviours (Farrington et al., 1996). For G3 daughters, the transmission could be explained by some risk factors that they may face in the context of family, such as parental separation. This is consistent with the notion that girls spend more time at home and thus are exposed to more risks posed by criminal parents (Silverthorn & Frick, 1999). These findings seem to be consistent with other research, which indicated that daughters are particularly vulnerable to repeating their parents’ criminal behaviour, especially when they experience insecure family environments in childhood (Auty et al., 2017). The results further show that the effect of parental convictions on their children’s convictions was different between fathers and mothers. There was a significant direct intergenerational association in criminal behaviour between fathers and children, but for mothers, the association appeared to be more indirect than direct. These findings are in line with a growing body of research demonstrating different intergenerational pathways according to the gender of the parent (Thornberry et al., 2003, 2009a).

Continuity from G1 to G3

I observed some evidence of intergenerational transmission of convictions from G1 grandparents to G3 grandchildren. I found one significant relationship between G1
grandfathers and G3 grandsons (OR=1.808) and one marginally significant relationship between G1 grandfathers and G3 granddaughters (OR=2.247). These findings are contrary to that of Farrington and Crago (2016), who found that the only significant relationship was between G1 grandfathers and G3 daughters. All the relationships between G1 and G3 had quite high ORs, and interestingly, the strength of intergenerational transfer was largest from G1 grandmothers to G3 granddaughters (OR=2.313), although this association was not statistically significant, possibly due to the small number of convictions of both G1 grandmothers and G3 granddaughters. Therefore, these findings provide evidence of some increased risk of convictions from G1 grandparents to G3 grandchildren.

It was found that the degree of intergenerational transmission of convictions from G1 grandfathers to G3 grandsons and from G1 grandfathers to G3 granddaughters decreased to insignificance after controlling for convictions of G2 parents, suggesting an indirect effect of G1 grandparents’ convictions on G3 grandchildren’s convictions. It can thus be suggested that G1 grandparental convictions may influence their G3 grandchildren’s convictions indirectly by influencing G2 parents’ criminal behaviour (Robins et al., 1975).

6.2 Qualitative case history analyses

The main objective of the qualitative case history analyses was to focus on the life stories of a sample of CSDD families of three generations based on qualitative prospective in-depth interviews. These analyses involved the case histories of eight CSDD men and their families of three generations, falling into the following four categories, depending on whether G1, G2, and G3 was convicted or not: (1) convicted G1, convicted G2, and convicted G3 (CCC); (2) convicted G1, convicted G2, and unconvicted G3 (CCN); (3) convicted G1, unconvicted G2, and convicted G3 (CNC); and (4) unconvicted G1, convicted G2, and convicted G3 (NCC). The case histories of eight CSDD men and their families of three generations were therefore presented to illustrate the lives of individuals who did or did not perpetuate a cycle of criminal behaviour within families. These illustrative case histories were designed to present a picture of the complexity of factors and associated mechanisms of continuity in the first (CCC), second (CCN), and fourth categories (NCC), and of discontinuity in the second (CCN), third (CNC), and fourth categories (NCC). The current analyses contribute to an increased understanding of both continuity and discontinuity in criminal behaviour from one generation to the next by
highlighting the importance of factors and mechanisms related to breaking or maintaining the cycle of intergenerational transmission of convictions in the context of qualitative investigations.

Simon (case 020) and Derek (case 781), from the category of CCC, were convicted males of convicted parent(s), and their children were also convicted. Unlike men from other categories, the two men appeared to be chronic offenders whose antisociality started at an early age and persisted into adulthood. Their lives were seriously handicapped by their maladjustment, antisociality, and difficulties that went back to their childhood. Most of the childhood experiences of the two men were characterised by poor parental supervision and monitoring, parental neglect, parental conflict, parental separation/divorce, family instability, physical punishment, and poverty. Throughout their childhood, they lived in a persistently disorganised family environment with disturbed parents who had drinking problems, and mental health problems, resorted to violence at home, and had criminal histories. This is in line with Farrington’s (2002;2011) postulation that criminal parents and their children are both exposed to the same cluster of risk factors (e.g., poverty, poor parental supervision, family instability) that may increase the risk of continuing the cycle of offending within families. At school, Simon and Derek had problems making friends, lacked concentration, and had poor school attendance. Derek, who amassed 18 convictions, took many risks and showed high daring, destructiveness, and troublesomeness. Once adults, they continually displayed difficulties in adjusting to their adult lives, complicated by their antisocial attitudes and behaviours. Their level of antisociality dropped off for a while after they were married, but they maintained a deviant and antisocial lifestyle into adulthood, involving heavy drinking, aggressiveness, and fights. Derek led a more unsuccessful life as adults, characterised by unstable intimate relationships, violence to a spouse, divorce and a child living elsewhere, drug abuse, and sexual promiscuity. They appeared to be the most deviant after age 48, according to their official convictions, and most of their convictions were theft and assault, indicating their high levels of aggressiveness and impulsivity. The continuation of a pattern of maladjustment and antisociality that was observed from childhood to adulthood seemed inevitable, such that they came to accept this as part of daily life.

As with their parents, Simon and Derek brought up their children in a criminogenic family environment, characterised by poor parental supervision, parental neglect, parental conflict, and harsh discipline. This finding is consistent with a solid body of research showing
intergenerational continuity in parenting practices that may be an intervening mechanism for familial transmission of antisocial behaviour (e.g., Conger et al., 2003; Hops et al., 2003; Smith & Farrington, 2004). A possible explanation for the finding is that parenting experienced in one generation might be repeated in the next through processes of modelling and social learning. Moreover, Simon’s and Derek’s children were left exposed to their socially maladjusted behaviours, such as heavy smoking, alcohol and drug abuse, aggressiveness, and criminal offences. Therefore, it was no surprise that their children behaved in a similar fashion with respect to antisocial behaviours and maladjustment. In line with Thornberry’s (2005) Interactional Theory, Simon and Derek did have problems with adult roles and tended to provide their children with a risky home environment, thereby increasing the chance that their children will also be involved in antisocial behaviour. Interestingly, the continuity from Derek to his children appeared to be under greater genetic influences. Derek’s children experienced parental divorce when they were very young, and they had virtually no contact with him after the divorce. However, they appeared to be very similar to their father on certain antisocial traits and behaviours. They had a high PCL:SV score and led a deviant lifestyle involving alcohol and drug abuse and fights, which was similar to that of Derek. Derek’s children were therefore likely to have inherited more than a few characteristics and personal traits from Derek, which were responsible for the transmission of antisocial and criminal behaviours. It was difficult to see their deviant characteristics as coming from their mother; she was a woman who admittedly seemed to know her own mind but who appeared to live a fairly conventional and non-criminal life. Hence, their high PCL:SV scores may have been largely due to genes from their father – Derek. This finding suggests that one of the mechanisms through which criminal parents may influence child criminal behaviour can be through genetic factors (Cadoret et al., 1997; Mednick et al., 1987).

Jacob (case 992) and Collin (case 732), from the category of CCN, were convicted males of convicted fathers, but their children did not follow in their criminal footsteps. Although Jacob and Collin were from the same category of CCN, their lives seemed to tell a different story, possibly due to their different criminal careers. Jacob was a chronic offender with 10 official convictions; he started his criminal career at age 17 and committed his last offence at age 55. His early family life was characterised by a large family, parental conflict, poor housing, poor parental control, parental neglect, and lax parental attitudes. When he was young, his mother had physical and mental health problems, and his father drank heavily and
tended to withdraw from family life. Both of his parents were convicted before Jacob reached the age of 10, and his mother was even sent to prison when Jacob was only 7. The transmission of crime to Jacob can be therefore partly explained by ‘double whammy effects’ (Scarr & McCartney, 1983). In other words, Jacob might have been able to inherit genetic predispositions for criminal behaviour twice from both his parents, and he might have also been raised in a more criminogenic environment. As a result, Jacob continued to exhibit persistent involvement in crime and also displayed difficulties in adjusting to his adult life that led to unstable intimate relationships, fights, erratic working patterns, alcohol and drug abuse, sexual promiscuity, and mental health problems.

What was surprising was that Jacob’s children did not follow in his criminal footsteps. His children experienced parental divorce and remained with their mother when they were very young. They were then raised by their mother and stepfather who also had criminal histories. Although they were no longer exposed to Jacob’s criminal behaviours, they were still at risk of criminal offending due to their exposure to antisocial and criminal behaviours from their mother and stepfather. While their mother had alcohol and drug problems and committed three official offences (although relatively trivial), their stepfather was a chronic offender who committed 16 official offences. It is therefore difficult to explain why none of Jacob’s children were convicted, but it might be partly explained by their positive experiences with their parents (their natural mother and stepfather) during childhood; they recalled happy memories from their childhood. It may be that their natural mother and stepfather, who had criminal histories, served as a barrier and protected them from their criminogenic influences, which is in line with earlier research suggesting that criminal parents can be effective parents (Farrington, 2011; Giordano et al., 2002). Another possible explanation might be that Jacob’s children were female, or they were just lucky to avoid being convicted. In the CSDD, G3 female children were less likely to be convicted than G3 male children (10% versus 30%), so the convictions of G3 female children were unusual.

Unlike Jacob, Collin was convicted of breaking and entering at age 12 and was not convicted of any further offences. His antisocial behaviour began in childhood but did not extend beyond adolescence and adulthood. His childhood antisocial behaviours might be accounted for by his early family life, characterised by an authoritative parental attitude, poor parental supervision, overcrowding, poor housing, and poverty. While his mother had some physical and mental health issues, his father had difficulties controlling his behaviour and was
convicted of assault when Collin was 8. Nevertheless, Collin’s parents had high hopes for his academic achievements. The fact that his parents’ main reason for moving to England was the children’s education showed their great ambition concerning the children's success. Consequently, Collin was able to develop positive features as adults, such as high educational attainment, stable employment patterns, and financial stability, all of which might have played an important role in making him desist from crime. These findings suggest that parental interest in education may help protect children from the negative consequences associated with early family life.

Collin repeated the authoritative parenting he experienced while growing up, but unlike his parents, he was financially secure and able to provide better housing conditions for his children. His children appeared to grow up in a happy family condition, where parental affection and support were adequate, and none of them displayed particularly serious problem behaviours. Collin’s children appeared to have experienced successful transitions into early adulthood, including completing high school, entering university (two of them graduated), and achieving stable employment. These successful transitions might have directed their life paths away from crime, thereby breaking the cycle of familial offending. These findings suggest that high educational attainment may be an important gateway to successful outcomes in early adult life and thus potentially having a blocking influence on the transfer of criminality from one generation to the next.

Roger (case 081) and Dean (case 813), from the category of CNC, were unconvicted males of convicted fathers, and their children were convicted. A pattern of similarity seemed to be present in their lives. Compared to men from other categories, the two men grew up in a relatively favourable family home, characterised by parental harmony, adequate parental support and care, and financial stability. Their parents were very concerned about them and showed great interest in their education, and they did well at school. This is consistent with some prior research demonstrating that favourable family environments may protect children in the face of the risk represented by criminal parents (Dong & Krohn, 2015; Smith et al., 1995). Roger and Dean were as likely as convicted males to be socially deviant in some aspects of their adult lives. For example, Roger was frequently involved in heavy drinking, drunk driving and fights, while Dean drank heavily and had difficulty in establishing long-term relationships. Nonetheless, again, compared to men from other categories, the two men were generally successful in many aspects of their adult lives, especially in having stable employments and
accommodations and being financially stable. These aspects might have played a role in helping them to stay free from convictions. Another possible reason why Roger and Dean did not follow in their father’s criminal footsteps may be that their fathers were late-onset offenders who were only convicted of theft from work (which was relatively trivial) between ages 32 and 48 and thus did not differ much from unconvicted fathers. In line with social learning mechanisms, it may be that their criminal fathers displayed less antisocial behaviours and therefore served as less powerful criminal role models for them, making it less likely that Roger and Dean would also develop criminal behaviours. This is consistent with earlier research showing that intergenerational transmission might vary depending on the trajectories of parental criminal behaviour (Van de Rakt et al., 2008; Besemer & Farrington, 2012). Although Roger did not follow in his father’s criminal footsteps, he admitted to having taken home 8lbs of meat each week when he worked in a butcher’s shop, and he claimed that it was a legal fringe benefit, but he practically stole from work, just like his father. It is reasonable to assume that Roger was aware of his father’s criminal behaviour, which gave him permission to engage in the same types of behaviour. Therefore, the behavioural similarity between Roger and his father might be the consequence of social learning mechanisms.

Roger had two daughters, and one of his daughters was convicted. His two daughters, growing up in the same family, appeared to have different childhood family experiences, leading to different outcomes. While the older one, who was unconvicted, tended to receive adequate parental supervision and monitoring, the younger one, who was convicted, often remained away from home without her parents knowing her whereabouts. The younger one was also more harshly and strictly treated by her parents as a child, possibly due to her frequent engagement in delinquent behaviours, such as fights, bullying, risky behaviours, drug use, and school expulsion. Compared to the older one, she led a less successful life as a young adult, characterised by irregular job records, alcohol and drug abuse, smoking, drunk driving, and offending behaviour. Therefore, her early experiences of poor parental supervision and negative parental treatment might have placed her at greater risk of developing antisocial behaviours that persisted into adulthood.

Dean had two sons, and one of his sons was convicted. Both of his sons manifested some antisocial attitudes and behaviours from an early age, and these problems were likely to stem from their unstable high-conflict family environments while growing up. They were constantly exposed to parental conflict and also experienced their father’s frequent absences.
Jasper (case 104) and Calum (case 680), from the category of NCC, were convicted males of unconvicted parents, and their children were also convicted. From an early age, the two men displayed behavioural problems (aggressive, overactive, fearless, restless), possibly arising from rearing in adverse family environments characterised by a large family, overcrowding, poor parental supervision, erratic/harsh discipline, permissive parenting, poor housing, and low parental involvement in education. Jasper started to associate with some deviant peers in adolescence, amplifying his delinquent activities – carrying weapons, stealing, drinking, taking drugs, and fighting. On the other hand, Calum experienced his father’s death in childhood, resulting in both a lack of adequate parental care and his mother’s mental health problems. His early traumatic experiences apparently caused him to be more vulnerable to delinquent behaviour and thus contributed to his involvement in antisocial activities in adolescence, including carrying weapons, stealing, and fighting. The two men’s antisocial behaviours peaked in their teenage years and dropped off after they were married. However, Jasper committed his first crime with his wife in his late twenties; they obtained food from supermarkets using stolen cheque books. Given his situation in which he earned a very low income but had his wife and three children to support, he used crime to obtain food. His lack of successful routes out of poverty seemed to be what motivated him to commit the crime. Calum stopped offending by the age of 27 and appeared to be successful in some aspects of his adult life, especially in having stable employment and being financially secure. At the same time, however, he continued a deviant lifestyle into adulthood, involving heavy drinking, habitual drunk driving, and sexual promiscuity.

A pattern of maladjustment and antisociality that was observed in their early life seemed to continue into their adulthood, and this undoubtedly put their children at risk and
increased the chance that their children also become involved in crime. Jasper and Calum raised their children in a similar criminogenic family environment to what they had experienced while growing up. Their children all had psychosocial difficulties arising from living with parents who had criminal histories and maintained an antisocial lifestyle. Calum’s children experienced parental divorce in adolescence, and this caused less parental supervision due to their mother’s absence. No doubt their children were at risk of being subjected to criminogenic home environments as well as inheriting genetic influences from criminal parents. Consequently, their children showed similar patterns of antisocial behaviours, such as heavy drinking, drunk driving, speeding, fighting, and sexual promiscuity. Unlike Calum, interestingly, all his children were drug abusers; they began taking drugs early in life and took cannabis daily. It might be possible that they influenced each other’s drug use behaviours. For example, the older siblings might have acted as role models for the younger siblings, and the younger siblings might be both routinely and deliberately exposed to drug use by the older siblings. This finding confirms previous analyses showing considerable sibling similarity in antisocial behaviour (Rowe & Gulley, 1992; Rowe et al., 1996).

6.3 The overall results of quantitative and qualitative analyses

By integrating quantitative and qualitative data in the form of a mixed methods research, the thesis was able to provide a richer and more comprehensive understanding of the intergenerational transmission of conviction, especially of some of the mediating pathways involved. The results from both quantitative and qualitative data appear to supplement each other, providing further insight into how children of criminal parents become criminal or noncriminal themselves. The results from qualitative data, in the form of case history analysis, address a gap in the literature by identifying possible additional mechanisms underlying continuity or discontinuity in criminal behaviour. The results, though tentative and in need of replication and extension, suggest that parental conviction increases the risk of offspring convictions, and that the observed association may occur through several mechanisms, mainly through mediating mechanisms found in the family. The results may help better understand the mechanisms by which continuity or discontinuity in criminal behaviour occurs and further inform treatment and prevention programmes.
The key results from both qualitative and quantitative analyses provided adequate evidence that intergenerational transmission of conviction may be mediated by risk factors, particularly family risk factors. The quantitative data revealed that the degree of intergenerational transmission decreased after controlling family, socioeconomic, and individual risk factors, suggesting that these factors were important mediators. The most important mediators in the transmission for both G2 and G3 generations were found to be associated with a child’s family and home environment (e.g., parental separation, poor parental supervision, large family size, poor housing, low family income). The qualitative data provide further evidence of the mediating mechanisms underlying intergenerational transmission, showing that the convicted parents tended to be frequently in conflict with and violent towards their partner, to have low incomes, to use physical punishment, to poorly monitor and supervise their children, and to have no interest in education, and this seemed to increase the likelihood of their children’s conviction. A similar set of family risk factors was identified as possible mediators in both quantitative and qualitative analyses. However, some of the risk factors, such as parental conflict and low parental involvement in education, appeared to act as mediators in the qualitative analyses, but not in the quantitative analyses. A possible explanation for this might be that parental conviction may predict these factors, and these factors may predict offspring conviction, but parental conviction still may predict offspring conviction, even in the present of these factors, as found in the quantitative analyses. Nevertheless, three family risk factors – parental separation, low family income, and poor parental supervision – were found in both quantitative and qualitative analyses and therefore seemed to be important mediators in the intergenerational transmission of criminal behaviour. The results from both qualitative and quantitative analyses provide support for the mechanism of mediating risk factors; the idea that the intergenerational transmission of criminal behaviour is mediated by risk factors for criminal behaviour, as discussed by Farrington (2002, 2011). The results are also in line with other studies that found the transmission is indirect and occurs through mediating factors, such as disrupted families (Jaffee et al., 2001), lack of parental involvement and monitoring ( Ehrensaft et al., 2003; Smith & Farrington, 2004), and poor parenting styles (Capaldi et al., 2003; Van Dijk et al., 2019). Overall, it seems that the qualitative findings strengthened the results obtained using the quantitative analyses, which in turn enhanced the validity of the findings of the thesis. The quantitative and qualitative findings here seem to reinforce the importance of family risk factors as mediators of the transmission of criminal behaviour across generations.
The results from qualitative analyses also showed some of the possible underlying mechanisms behind the intergenerational transmission of conviction, which cannot be observed with quantitative data. First, the qualitative data found that convicted parents and their children seemed to be exposed to the same cluster of risk factors, such as poverty, poor housing, disrupted family, parental conflict, and poor parental supervision, and these factors seemed to increase the risk that both parents and children were convicted of crime, suggesting that intergenerational transmission of conviction may occur through the transmission of risk factors for criminal behaviour. In agreement with the findings of previous studies (e.g., Bailey et al., 2006; Capaldi et al., 2003; Bird, 2013), these findings support the idea that exposure to multiple risk factors leads to the intergenerational transmission of criminal behaviour (Farrington, 2002, 2011). Second, the qualitative data showed evidence of continuity in parenting practices across generations. The convicted parents who used inadequate parenting practices tended to produce children who used similar parenting practices when they grew up, and this similarity of parenting behaviour from parents to children appeared to contribute to familial resemblance of criminal behaviour. In line with the findings of previous studies (e.g., Conger et al., 2003; Hops et al., 2003; Capaldi et al., 2003; Smith & Farrington, 2004), these findings suggest that intergenerational transmission of criminal behaviour may be at least partially explained by the similarity of parenting behaviour from parents to children. Although the qualitative findings are suggestive and tentative, these findings seem to strengthen the overall results on the intergenerational transmission of criminal behaviour by providing a more complete picture of how parental conviction influences offspring conviction. Together, although it was not possible to see which of the mechanisms was more responsible for intergenerational transmission, the results from both qualitative and quantitative analyses seemed to support the mechanisms involving risk factors as described by Farrington (2002).

Looking at the mechanisms underlying discontinuity of criminal behaviour, the results from qualitative analyses showed some of the family factors that may prevent children of criminal parents from following in their parents’ footsteps. For example, children of convicted parents who nevertheless did not become offenders tended to receive adequate parental supervision, to have good relationship with their parents, and to have parents who were interested in education. There was some evidence that some influential familial factors, such as adequate parental supervision, good relationship with parents, and parental involvement in education, appeared to be factors protecting children from following in their parents’ footsteps. These
findings are in line with prior research indicating that good parental supervision and emotionally close relationships with parents may protect some children in the face of risk represented by their parents’ involvement in crime (Dong & Krohn, 2015; Kolvin et al., 1990; Smith et al., 1995). Findings indicated that these factors provided children with access to prosocial activities and relationships with peers, teachers, and other positive adults, which helped them to develop prosocial, non-criminal identities and embark on conventional adult lives. Moreover, children of convicted parents who nevertheless did not become offenders tended to do well at school and complete education. Their educational attainment seemed to increase the chance of success defined conventionally through employment and income, thereby protecting them from following in their parents’ footsteps. Along with educational investment of parents, educational attainment appeared to be a buffer against the transfer risk to the next generation.

The overall results confirm previous findings (e.g., Jaffee et al., 2001; Bailey et al., 2009; Van Dijk et al., 2019; Smith & Farrington, 2004), showing that having a criminal parent increases the chance that the child will also be involved in criminal behaviour, and that this intergenerational effect is mediated by family risk factors, pointing towards an indirect rather than a direct intergenerational transmission. The results, therefore, seem to support Farrington’s (2002) mediation mechanism of intergenerational transmission. The results indicate that not only does it appear that early involvement in antisocial behaviour is related to an increased risk for antisocial and criminal behaviour in later life, but criminal behaviour in childhood and adolescence also leads to negative developmental consequences that affect the lives of the subsequent generation. Parents who are antisocial in early life tend to have problems with adult roles including parenthood; they struggle to provide their children with a family environment that promotes prosocial behaviour and deters antisocial behaviour, and they bestow upon their children a risky environment conductive to the transmission of criminal behaviour. Therefore, it seems that criminal behaviour is not directly transmitted from parents to children but rather though the mediating mechanisms found in the family, especially poor parenting practices. These findings support Thornberry’s (1987) interactional theory.

However, contrary to what was found based on the idea of social learning, the intergenerational effect in G2-G3 analyses is similar for both separated and unseparated children or even higher for separated children. This outcome is contrary to previous studies which have found no significant intergenerational transmission for children whose parents were
divorced or separated (Van de Rakt et al., 2010), whose fathers had infrequent or no contact with them (Thornberry et al., 2009b), or whose fathers had not lived with them (Blazei et al., 2008; Jaffee et al., 2003). A possible explanation for this outcome might be that having a convicted parent and having experienced parental separation may both act as risk factors and have additive effects, thereby leading to stronger intergenerational transmission for separated children. It is the combination of risk factors that is important. Thus, this does not support stronger learning influences as discussed in the literature. This outcome could also be explained by the age graded theory of informal social control, as Sampson and Laub (1990, 1993) argue that parental divorce leads to weaker bonds with parents and less parental supervision due to the absence of a parent, which may increase the children’s chances of criminal behaviour.

The results further highlight the importance of specific life events as mechanisms underlying both continuity and discontinuity in criminal behaviour across generations. The qualitative data shows that some of the convicted men stop offending after marriage, although they continue to offend after some time. When they enter into a marriage, they tend to spend less time with deviant friends and more time with spouses. It may be that getting married may provide opportunities for turning points out of any negative life course trajectories and may thus drive individuals toward conventional norms and behaviours (Sampson & Laub, 1993). However, this is not the case for those who married convicted women (e.g., case 992, case 680). Conversely, separation from a wife seems to facilitate continued involvement in crime. The qualitative data shows that some of the convicted men indeed commit more offenses after divorce. This finding is in line with those reported by Farrington and West (1995). Moreover, those with stable employment tend to stop offending. It may be that stable employment may offer informal social control, which foster conformity and compliance with societal rules (Sampson & Laub, 1993). Again, conversely, some of the convicted men tend to commit more offenses during their periods of unemployment. These findings are consistent with life-course theory (Sampson & Laub, 1990, 1993, 1997) and some prior research suggesting that important transitions in the life cycle (e.g., getting married or getting a job) influence the development of criminal behaviour (Uggen & Wakefield, 2008). Therefore, the influence of life events on offending at different ages seems to be fruitful in advancing knowledge about intergenerational continuities and continuities in criminal behaviour.

The overall results seem to highlight how the family risk factors that are associated with parental criminality increase the risk for offspring criminality over time. The
Developmental and Life-Course (DLC) theories have therefore provided a possible angle exploring intergenerational continuity and discontinuity in criminal behaviour, as they provide a complementary perspective to understand how parental offending influences offspring offending by considering criminal behaviour within the context of developmental processes that differ for individuals contingent on their characteristics, histories, and risk factors (Farrington, 2017). It would be desirable if future studies further investigate the influence of parental criminal behaviour on development of criminal behaviour of children at different ages and developmental stages of the child. For example, while younger children might not be aware of their parents’ criminal behaviour but might be more sensitive to imitation of parental criminal behaviour, older children have more options to escape an unfavourable home environment but might experience more stigma and/or stress of having a criminal parent. Future research using the life-course approach might be able to identify multiple points of and types of family interventions for children of criminal parents.
Chapter 7

Conclusion

The main goal of the thesis was to investigate the intergenerational transmission of convictions prospectively across three generations using a combination of quantitative and qualitative approaches. My thesis has its strengths, as it utilises data from a prospective longitudinal follow-up of three successive generations from childhood to adulthood, using both qualitative and quantitative methods. This allows me to better understand the mechanisms by which continuity or discontinuity in criminal behaviour occurs and further inform treatment and prevention programmes.

My thesis has identified several possible mediators that might be targets for intervention efforts to break the cycle and prevent the next generation from becoming criminals. The possible mediators of transmission to G2 males reflected family problems (disrupted family, poor parental supervision, parental conflict), socio-economic disadvantages (large family size, poor housing), poor school attainment (low nonverbal IQ, low verbal IQ, low attainment), and behaviour problems (high dishonesty, high troublesomeness, high daring, high impulsivity). While risk factors were not directly comparable between generations, some of these results were replicated in the findings of the transmission to G3 males, where the most important mediators were separation of the father from a child, physical punishment of the child, the father’s low take-home pay, the child’s early school leaving, risk taking, school suspension, and no A-level qualifications. The transmission to G3 females was mediated by one variable: separation of the father from a child.

There are several important implications for prevention and interventions. The results indicate that criminal parents have adverse consequences for some domains of family life that eventually affect the lives of their children, indicating that interventions should be targeted on families with at least one criminal parent rather than on individuals. It is recommended to target childhood risk factors that might mediate the relationship between parent and child offending, particularly family risk factors, as early as possible. Early intervention programmes to help parents develop positive parenting skills, to improve the quality of family relationships, and to help families overcome socio-economic barriers, and to encourage educational interests
contribute to reducing the chance of children of criminal parents following in the footsteps of their parents. This will be particularly helpful for those who have a criminal parent combined with having other risk factors such as large family size, poor housing, low family income, and poor parental supervision. The results also show that parental separation and parental conviction in general are risk factors for offspring conviction, indicating the need to develop additional intervention strategies for children from intact families where one of the parents is criminal and when marital relationships are at increased risk of breakdown. It is recommended to improve access to family support and counselling services to help deal with the family stresses experienced from relationship conflicts, marital discord and separation. Findings from quantitative and qualitative data can contribute to the development of effective evidence-based family intervention strategies by identifying potential mechanisms of risk and protective factors involved in the association between parental conviction and offspring conviction. Evidence-based family interventions targeting children of criminal parents can be effective in preventing them from repeating the cycle of criminal behaviour by strengthening families and improving developmental outcomes. This would lead to considerable benefits that extend beyond the children and their families to society at large.

My thesis has some limitations. The first and most important limitation is the lower prevalence of convictions in females, which may reduce the statistical power of some of the statistical analyses. The analyses for males and females separately, therefore, must be interpreted with caution because these findings may be somewhat limited by the small numbers of G1 grandmothers, G2 mothers, and G3 daughters who had been convicted up to age 32 (7.4 per cent of G1 females, 11.8 per cent of G2 females, and 8.6 per cent of G3 females). Looking at gender-specific pathways of the transmission of conviction, the statistical analyses did not reveal a consistent pattern in the way that transmission from fathers to their children was more or less strong. Maternal transmissions of conviction to children seem the strongest in most instances, irrespective of children’s gender. Although the small numbers of convicted females may be inadequate to ensure detection of the effect in some of the statistical analyses, this finding may be possibly explained by the fact that criminal mothers are relatively more deviant than criminal fathers (perhaps because they are statistically less common). A further study with larger samples of females is therefore suggested. Second, my thesis has another issue with the generalizability of the results. The original G2 males in the Cambridge Study in Delinquent Development were white working-class British boys from two-parent families. It is, therefore,
questionable to what extent the results of this thesis can be generalised to the current populations. It is recommended for future research to assess the generalizability of the current findings to more diverse populations, such as ethnic minorities, middle-class children, and children from outside the UK or from single-parent families.

My thesis is also limited by its sole focus on the transmission of criminal convictions. The use of conviction data may underestimate the true number of offences committed and thus decrease the observed strength of the transmission of criminal convictions. It is likely that some children in the sample have parents who commit crimes that are not detected by the police. Therefore, some caution must be applied. Another limitation lies in the fact that the measures of G1 and G2 risk factors were not directly comparable. For example, a disrupted family in G1 was not the same as separation from G2, as a disrupted family referred to separation from a G1 parent that occurred before the G2 boy’s tenth birthday, but separation from G2 referred to separation from a G2 father that occurred before the G3 boy’s 16th birthday. While the information about some G1 risk factors was collected mainly from G1 mothers when the G2 male was 8-10, the information about some G2 risk factors was collected mainly from G2 males at their age 32, no matter how old the G3 child was. Some G2 risk factors (attainment, impulsiveness, and behaviour) were also based on retrospective reports of G3 males.

Further work needs to be done to establish to what extent risk factors are replicable over time and place. Additionally, establishing genetic influences on the intergenerational transmission of convictions was beyond the scope of my thesis. The effects of genetic factors could be only indirectly inferred by comparing children who had been separated from their parents with children who had not. It was also not possible to investigate all possible mechanisms, such as official bias, due to the lack of relevant data available for my thesis. Further research, using a wider range of variables, including genetic factors, could shed light on the mechanisms that are responsible for the intergenerational transmission of criminal behaviour.

Finally, due to space limits, my thesis describes the qualitative case histories of only eight CSDD men and their families. The qualitative case histories are based on information in the interview files in the CSDD, which may involve individuals’ opinions rather than facts (Zara & Farrington, 2016b). Therefore, any conclusions drawn from the qualitative case history analyses remain suggestive and tentative. Despite the results being suggestive, they shed some
light on the importance of family and early home environments in both intergenerational continuity and discontinuity of criminal behaviour among successive generations.
References


