Protective factors against the development of sexually abusive behaviour in sexually victimised males.

Daniel Charles Salter

Institute of Child Health
University College London
Ph.D. Thesis
Abstract: **Protective factors against the development of sexually abusive behaviour in sexually victimised males**

**Background:** Childhood victims of sexual abuse are thought to be at increased risk of becoming sexual abusers. This risk may further increase when also exposed to other forms of maltreatment. However, many victims of maltreatment do not become sexual perpetrators. Certain factors may play a protective role in averting the development of abusive behaviour when the risk is otherwise high. Though factors have been identified that protect against some outcomes of maltreatment, none have been found that protect against sexually abusive behaviour. The aim of this thesis was to identify such protective factors in sexually victimised males.

**Method:** A catch-up longitudinal design was employed. The sample consisted of 104 sexually victimised males referred to a major UK hospital between 1980 and 1992. Putative risk and protective experiences identified from the literature, and recorded prior to any acts of perpetration, were coded from contemporaneous social services and clinical documents. The coded values were summed to give 'risk index' and 'protective index' scores for each subject. Whether a subject subsequently became a sexual perpetrator was established from evidence of sexually abusive acts, recorded in social service and police files.

**Results:** The risk index was found to discriminate sexually victimised males who became sexual perpetrators (n=21) from those who did not (p<.01). The ability of the putative protective index to reduce the risk of perpetrating was tested using logistic and linear regression techniques. Although this index did not significantly reduce the risk of perpetrating, having a non-abusive female primary carer prior to age six was identified as a protective factor (p=.03). The interactions of risk with other individual factors relating to stable, non-abusive attachments with carers in the early years of life, approached significance (p≤.1), and warrant further investigation.

**Conclusion:** The results that approach or attain significance are consistent with an attachment theory perspective that non-abusive carer relationships in early life are protective against abusive behaviour in adulthood. Some inconsistency in the overall results suggests more investigation is necessary.
# Table of Contents

Abstract 2

List of Tables 10

List of Figures 12

Chapter 1 Prevalence and Effects of Child Sexual Abuse

## 1.1 Introduction 15

1.1.1 Definition of child sexual abuse 15

## 1.2 Prevalence of sexual abuse 16

1.2.1 Factors accounting for variation in prevalence rates 20

1.2.1.1 Definition 21

1.2.1.2 Methodology 23

1.2.1.3 Sample Characteristics 26

1.2.1.4 Prevalence of CSA in Male Samples 27

1.2.1.5 Summary 28

## 1.3 Effects of childhood sexual abuse 29

1.3.1 Initial effects of CSA ............................................................... 30

1.3.1.1 Externalised behaviour 31

1.3.1.2 Sexual behaviour and sexuality 31

1.3.1.3 Emotional effects 32

1.3.1.4 Physical effects 32

1.3.1.5 Summary 32

1.3.2 Long-term effects of CSA ....................................................... 33

1.3.2.1 Sexual behaviour and sexuality 33

1.3.2.2 Substance abuse 34

1.3.2.3 Depression and suicide 34

1.3.2.4 Summary 35

1.3.3 Methodological considerations ............................................. 36

1.3.3.1 Retrospective design 36

1.3.3.2 Co-occurring maltreatment and other factors 36

1.3.3.3 Inadequate or inappropriate samples 37

1.3.3.4 Severity of abuse 38

1.3.3.5 No hypothesised mechanism 38

1.3.3.6 Recent improvements in prevalence research designs 38

1.3.3.6.1 Meta-analysis 39

1.3.3.6.2 Community samples 41

1.3.3.6.3 Controlling for other factors 42
1.3.4 Summary ................................................................. 44

1.4 Conclusions ......................................................... 45

Chapter 2 Theories of the development of sexually abusive behaviour

2.1 Introduction .......................................................... 47

2.2 Theories involving prior victimisation .................. 47
  2.2.1 Psychodynamic based theories ....................... 49
    2.2.1.1 Identification with the aggressor .......... 49
    2.2.1.2 The ‘Fixed - Regressed’ Dichotomy .... 51
  2.2.2 Emotion based theories ............................... 54
    2.2.2.1 Shame ........................................... 54
    2.2.2.2 Intimacy theory ................................... 55
    2.2.2.3 Empathy theory .................................. 59
  2.2.3 Behavioural and Learning Theories ................. 61
    2.2.3.1 Classical and Operant Conditioning .... 61
    2.2.3.2 Social Learning Theory .................. 65
  2.2.4 Cognitive Distortions ................................... 68
  2.2.5 Synthesis of theories ................................... 71
    2.2.5.1 Four preconditions model .................. 71
    2.2.5.2 Caregiver inconstancy ..................... 72
    2.2.5.3 Cycle of abuse .................................. 73

2.3 Summary .............................................................. 76

2.4 A Developmental Psychopathology Perspective ........ 77

Chapter 3 Risk factors for the development of sexually abusive behaviour

3.1 Introduction .......................................................... 83

3.2 Childhood sexual victimisation as a risk factor for sexually abusive behaviour ........................................ 85
  3.2.1 Methodological issues ..................................... 85
  3.2.2 Prevalence of child sexual abuse amongst adult sexual offenders ........................................ 87
3.2.2.1 Studies with methodological problems 87
3.2.2.2 Studies employing community samples 92
3.2.3 Summary ....................................................................................98

3.3 Other risk factors 99
3.3.2 Physical abuse 99
3.3.3 Witnessing intrafamilial violence 102
3.3.4 Emotional abuse 103
3.3.5 Discontinuity of Care 105
3.3.6 Physical neglect 106
3.3.7 Social rejection 107
3.3.8 Antisocial behaviour 109
3.3.9 Intelligence 110
3.3.10 Other possible risk factors 111

3.4 Conclusion 112

Chapter 4 Protective Factors

4.1 Introduction 114

4.2 Key definitions 115
4.2.1 Resilience ....................................................................................116
4.2.1.1 Non-comparability of findings 117
4.2.1.1.1 Definition using a single factor 117
4.2.1.1.2 Definition using multiple factors 117
4.2.1.2 Variability of adaptation over time 118
4.2.1.3 Future directions 119
4.2.2 Protective factors ......................................................................120
4.2.2.1 Interaction effect model 120
4.2.2.2 Main effect model 122
4.2.3 Protective processes ..................................................................129
4.2.4 Summary ....................................................................................130

4.3 Evidence for the action of protective factors 131
4.3.1 Protective factors in sexual abuse research .........................131
4.3.1.1 Protection against perpetrating behaviour 132
4.3.1.2 Sexual abuse studies employing the interaction model of protection 137
4.3.1.3 Studies identifying compensatory factors 144
4.3.1.3.1 Compensatory factors identified 144
4.3.1.3.2 Critique of studies identifying compensatory factors 145
4.3.1.3.3 Summary 150
4.3.2 Other possible protective factors from the study of resilience ....................................................................................151
Chapter 5  Methodological Considerations

5.1  Introduction
5.2  Putative protective factors
5.3  Research design
5.4  Ethical considerations
5.5  Catch-up Longitudinal design
5.6  Sample
5.7  Measurement issues
5.8  Perpetrator information bias
5.9  Perpetrating outcome
5.10  Data analysis
5.11  Summary

Chapter 6  Methods

6.1  Aims
6.2  Hypotheses
6.3  Design
6.3.1  Department of Health Study
6.3.2  Ethical approval
6.3.3  Structure of the study
6.3.4  Minimisation of researcher bias
6.4  Participants
6.4.1  Ethnicity
6.4.2  Socioeconomic status
6.4.3  Place of residence
6.4.4  Involvement with professional agencies
6.4.5 Status of subject at referral 179

6.5 Procedures and Materials 180

6.5.1 Process 1: Creation of research tools ................................. 180
  6.5.1.1 Generation of the Computerised Trawling program 180
  6.5.1.2 Development of the maltreatment and protection measurement systems 181
  6.5.1.3 Risk factor section 183
  6.5.1.4 Protective factor section 184
    6.5.1.4.1 Construction of the Protective Index 186
  6.5.1.5 Reliability 187

6.5.2 Process 2: Establishing presence of predictor variables ...187
  6.5.2.1 Identification of the Sample 187
  6.5.2.2 Location of social service files 187
  6.5.2.3 Subjects' abuse/perpetration status at referral 192
  6.5.2.4 Trawling and coding of clinical and social service files 193

6.5.3 Process 3: Establishing the outcome ................................... 197
  6.5.3.1 Introduction 197
  6.5.3.2 Procedure for obtaining criminal records 197
    6.5.3.2.1 Convictions 198
    6.5.3.2.2 Cautions 198
    6.5.3.2.3 Subject matching information 200
  6.5.3.3 Coding of perpetrator status 202
    6.5.3.3.1 Criteria for coding perpetrator status based on extracted quotes 202
      6.5.3.3.1.1 Subjects aged 6-11 years 203
      6.5.3.3.1.2 Subjects aged 12 and over 203
    6.5.3.3.2 Criteria for coding perpetrator status based on criminal records 204
    6.5.3.3.3 Procedures for coding perpetrators of sexual abuse 204
      6.5.3.3.3.1 Subjects aged 6-11 years 204
      6.5.3.3.3.2 Subjects aged 12 years and over 204

6.5.4 Database record ............................................................. 205

Chapter 7 Results

7.1 Introduction to Results 206

7.2 Demographic variables 206

  7.2.1 Summary of sample demographics 206
  7.2.2 Data sources 208
7.3 Perpetration outcomes
7.3.1 Severity of act
7.3.2 Victim details
7.3.3 Perpetrator details
7.3.4 Duration of perpetrating behaviour

7.4 Risk factors
7.4.1 Bivariate analysis of risk factors
7.4.2 Testing Hypothesis 1

7.5 Protective factors
7.5.1 Associations between putative protective variables
7.5.2 Compensatory Factors
7.5.3 Number of non-abusive carers
7.5.4 Testing Hypothesis 2
7.5.5 Analysis of other putative protective variables
7.5.6 Further analysis
  7.5.6.1 Removal of Outliers
  7.5.6.2 Matched pairs
  7.5.6.3 Early vs. Late perpetrators
  7.5.6.4 Excluding factors with inadequate reliability

Chapter 8 Discussion

8.1 Introduction

8.2 Description of the main results
8.2.1 Summary

8.3 Discussion of the results
8.3.1 Demographic data
8.3.2 Perpetrator group size
8.3.3 Risk factor analysis
8.3.4 Compensatory factor analysis
8.3.5 Protective factor analysis
  8.3.5.1 The protective index
  8.3.5.2 Individual putative protective factors from the protective index
  8.3.5.3 Identification of protective factors not included in the protective index
  8.3.5.4 Further methodological considerations

8.4 Theoretical implications

8.5 Clinical implications

8.6 Future research
### Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1</td>
<td>Reliability</td>
<td>277</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>Trawling and Coding Manual</td>
<td>286</td>
</tr>
<tr>
<td>Appendix 3</td>
<td>Protective Factors Coding Sheet</td>
<td>359</td>
</tr>
<tr>
<td>Appendix 4</td>
<td>GOSH Research Ethics Committee approval letter</td>
<td>363</td>
</tr>
<tr>
<td>Appendix 5</td>
<td>Office for National Statistics ethics approval letter</td>
<td>366</td>
</tr>
<tr>
<td>Appendix 6</td>
<td>Association of Chief Police Officers Crime Committee letter</td>
<td>369</td>
</tr>
</tbody>
</table>

### References

371
### List of Tables

<table>
<thead>
<tr>
<th>Table No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Prevalence of sexual abuse in females including and excluding non-contact behaviour</td>
<td>21</td>
</tr>
<tr>
<td>1.2</td>
<td>Reported initial and long-term effects of Child Sexual Abuse</td>
<td>30</td>
</tr>
<tr>
<td>1.3</td>
<td>Effect sizes and confidence intervals for the relationship between CSA and various outcomes (Rind et al., 1998)</td>
<td>39</td>
</tr>
<tr>
<td>1.4</td>
<td>Effect sizes (r) for associations between CSA and self-esteem, depression and other symptoms (Jumper, 1995)</td>
<td>40</td>
</tr>
<tr>
<td>3.1</td>
<td>Self-reported sexual victimisation in childhood among adult male sex offenders and non-sex offending groups</td>
<td>90</td>
</tr>
<tr>
<td>3.2</td>
<td>Self-reported sexual victimisation in childhood among adolescent male sex offenders and non-sex offending groups</td>
<td>90</td>
</tr>
<tr>
<td>3.3</td>
<td>Association between sexual victimisation and sexual perpetration (Borowsky et al., 1997)</td>
<td>95</td>
</tr>
<tr>
<td>4.1</td>
<td>Studies that identify compensatory factors for victims of sexual abuse</td>
<td>146</td>
</tr>
<tr>
<td>6.1</td>
<td>Details of professional involvement with subjects</td>
<td>180</td>
</tr>
<tr>
<td>6.2</td>
<td>Minimum criteria for coding putative risk factors as present</td>
<td>183</td>
</tr>
<tr>
<td>6.3</td>
<td>Definitions of putative protective factors</td>
<td>184</td>
</tr>
<tr>
<td>7.1</td>
<td>Socio-demographic characteristics of the sample</td>
<td>207</td>
</tr>
<tr>
<td>7.2</td>
<td>Size and Proportions of groups who experienced risk factors and tests of between-group differences</td>
<td>213</td>
</tr>
<tr>
<td>7.3</td>
<td>Statistic calculated for associations between protective factors</td>
<td>215</td>
</tr>
<tr>
<td>7.4</td>
<td>Associations between putative protective factors</td>
<td>216</td>
</tr>
<tr>
<td>7.5</td>
<td>Bivariate analysis of putative protective factors</td>
<td>217</td>
</tr>
<tr>
<td>7.6.1</td>
<td>Logistic Regression including risk index x protective index interaction term</td>
<td>221</td>
</tr>
<tr>
<td>7.6.2</td>
<td>Logistic Regression including risk index x protective index interaction term and control variables</td>
<td>221</td>
</tr>
<tr>
<td>7.6.3</td>
<td>Linear Regression including risk index x protective index interaction term</td>
<td>222</td>
</tr>
<tr>
<td>7.6.4</td>
<td>Linear Regression including risk index x protective index interaction term and control variables</td>
<td>222</td>
</tr>
<tr>
<td>7.7</td>
<td>Significance of interactions between the risk index and the constituent factors in the protective index excluding control variables, using logistic and linear regressions</td>
<td>224</td>
</tr>
<tr>
<td>7.7.1</td>
<td>Logistic regression including Risk Index x Number of years in non-abusive foster care interaction term</td>
<td>224</td>
</tr>
<tr>
<td>7.7.2</td>
<td>Logistic regression including Risk Index x Longest period with the same carer interaction term</td>
<td>225</td>
</tr>
<tr>
<td>7.7.3</td>
<td>Logistic regression including Risk Index x Longest period with same carer interaction term and control variables</td>
<td>225</td>
</tr>
<tr>
<td>7.7.4</td>
<td>Logistic regression including Risk Index x Number of care units before 12th birthday interaction term</td>
<td>226</td>
</tr>
<tr>
<td>Table No.</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>7.7.5</td>
<td>Logistic regression including Risk Index x No. of male non-abusive primary carers before 12&lt;sup&gt;th&lt;/sup&gt; birthday interaction</td>
<td>226</td>
</tr>
<tr>
<td>7.7.6</td>
<td>Logistic regression including Risk Index x No. of female non-abusive primary carers before 12&lt;sup&gt;th&lt;/sup&gt; birthday interaction term</td>
<td>227</td>
</tr>
<tr>
<td>7.7.7</td>
<td>Logistic regression including Risk Index x Good relationship with adult interaction term</td>
<td>227</td>
</tr>
<tr>
<td>7.7.8</td>
<td>Logistic regression including Risk Index x Good relationship with sibling interaction term</td>
<td>228</td>
</tr>
<tr>
<td>7.7.9</td>
<td>Logistic regression including Risk Index x Good relationship with peer interaction term</td>
<td>228</td>
</tr>
<tr>
<td>7.8.1</td>
<td>Linear regression including Risk Index x Number of years in non-abusive foster care interaction term</td>
<td>229</td>
</tr>
<tr>
<td>7.8.2</td>
<td>Linear regression including Risk Index x Longest period with the same carer interaction term</td>
<td>229</td>
</tr>
<tr>
<td>7.8.3</td>
<td>Linear regression including Risk Index x Number of care units before 12&lt;sup&gt;th&lt;/sup&gt; birthday interaction term</td>
<td>230</td>
</tr>
<tr>
<td>7.8.4</td>
<td>Linear regression including Risk Index x No. of male non-abusive primary carers before 12&lt;sup&gt;th&lt;/sup&gt; birthday interaction term</td>
<td>230</td>
</tr>
<tr>
<td>7.8.5</td>
<td>Linear regression including Risk Index x No. of female non-abusive primary carers before 12&lt;sup&gt;th&lt;/sup&gt; birthday interaction term</td>
<td>231</td>
</tr>
<tr>
<td>7.8.6</td>
<td>Linear regression including Risk Index x Good relationship with adult interaction term</td>
<td>231</td>
</tr>
<tr>
<td>7.8.7</td>
<td>Linear regression including Risk Index x Good relationship with sibling interaction term</td>
<td>232</td>
</tr>
<tr>
<td>7.8.8</td>
<td>Linear regression including Risk Index x Good relationship with peer interaction term</td>
<td>232</td>
</tr>
<tr>
<td>7.9</td>
<td>Size and significance of interactions between the risk index and the factors not in the protective index, excluding control variables, using logistic and linear regressions</td>
<td>233</td>
</tr>
<tr>
<td>7.10.1</td>
<td>Logistic Regression including Risk Index x Number of male sexually non-abusive primary carers pre 6 years interaction</td>
<td>234</td>
</tr>
<tr>
<td>7.10.2</td>
<td>Logistic Regression including Risk Index x Positive response to disclosure by non-abusive primary carer interaction term</td>
<td>234</td>
</tr>
<tr>
<td>7.10.3</td>
<td>Logistic Regression including Risk Index x Positive response by non-abusive primary carer interaction and control variables</td>
<td>235</td>
</tr>
<tr>
<td>7.11</td>
<td>Proportions of perpetrators with low and high risk scores who received a positive response to their disclosure</td>
<td>236</td>
</tr>
<tr>
<td>7.12</td>
<td>Linear Regression including Risk Index x Number of non-abusive female primary carers pre 6 years interaction term</td>
<td>237</td>
</tr>
<tr>
<td>7.13</td>
<td>Proportions of perpetrators with low and high risk scores who had positive response to their disclosure</td>
<td>237</td>
</tr>
<tr>
<td>7.14</td>
<td>Linear Regression including Risk Index x No. of non-abusive female primary carers pre 6 years – including control variables</td>
<td>239</td>
</tr>
</tbody>
</table>
List of Figures

<table>
<thead>
<tr>
<th>Figure No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Model of an ‘interaction effect’ protective factor</td>
<td>121</td>
</tr>
<tr>
<td>4.2</td>
<td>Model of a ‘main effect’ protective factor</td>
<td>121</td>
</tr>
<tr>
<td>4.3</td>
<td>Luthar’s (1993) suggested models of protection including both</td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>interactions (A-C) and a main effect (D).</td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td>Structure of the study</td>
<td>176</td>
</tr>
<tr>
<td>6.2</td>
<td>Selection of the sample</td>
<td>188</td>
</tr>
<tr>
<td>6.3</td>
<td>Inclusion criteria for the study sample</td>
<td>189</td>
</tr>
<tr>
<td>6.4</td>
<td>The abuse/perpetration status of the sample at date of referral</td>
<td>192</td>
</tr>
<tr>
<td></td>
<td>to GOS</td>
<td></td>
</tr>
<tr>
<td>6.5</td>
<td>Process for assigning cut-off dates</td>
<td>196</td>
</tr>
<tr>
<td>7.1</td>
<td>Graph of the interaction between the risk index and a positive</td>
<td>236</td>
</tr>
<tr>
<td></td>
<td>response by a non-abusive primary carer</td>
<td></td>
</tr>
<tr>
<td>7.2</td>
<td>Graph of the interaction between the risk index and the number</td>
<td>238</td>
</tr>
<tr>
<td></td>
<td>of female non-abusive primary carers by the age of 6</td>
<td></td>
</tr>
<tr>
<td>8.1</td>
<td>Graph of hypothetical perpetration outcomes in a risk x protection</td>
<td>257</td>
</tr>
<tr>
<td></td>
<td>interaction</td>
<td></td>
</tr>
</tbody>
</table>
Acknowledgements

I would like to acknowledge the many people who have played a part, however small, in supporting me with this research. Unfortunately, limited space allows me to name only a select few. I want to start with my parents, who have always been behind me through my academic career, but whose emotional and financial backing made my move into psychology so much more possible. I am grateful for the qualities they helped to develop in me, including commitment and a strong work ethic, which have helped me to bring this thesis to completion.

I would like to thank my fellow members of the CSA team at the Institute of Child Health for their professional, practical help in the data-gathering process. Thank you also for making the research so much more enjoyable to conduct with your friendship and humour. I particularly single out Dean McMillan, whose advice and support were especially valuable to me as a fellow PhD student and friend.

I would also like to thank my supervisors for their support over the past four years: David Skuse, for the considerable part he played in creating the opportunity for this research to be done and for the guidance he gave in his leadership of the Dept. of Health project; Toni Bifulco, for the expert knowledge and advice she was so willing to give, which frequently opened up new and helpful avenues; and particularly Richard Hastings, who has helped me through every phase of this project, whether I was striding out or stumbling blindly, both as a skilled researcher and a much valued friend.

Finally, I would like to thank my wife, Daniela, for her patient love and encouragement throughout the last four-and-a-half years, during which she has ‘shared’ me with this project. I am particularly grateful for her thoughtful insight which was both practically and emotionally supportive, and for creating the space for me to work, especially following the birth of our two sons. It truly would not have been possible without her.
To my grandparents

Charles and Dorothy Salter
Benzion and Rivka Nistel
Chapter 1  Prevalence and Effects of Child Sexual Abuse

1.1 Introduction

The subject of this thesis is the role of protective factors in the development, in adolescent and adult males, of sexually abusive behaviour towards children. More specifically, the widely hypothesised relationship between the perpetration\(^1\) of such abuse and previous childhood sexual victimisation\(^2\) will be explored, with particular focus on identifying factors that reduce the likelihood of an abusive outcome.

However, the purpose of this first chapter is to establish the importance and relevance of this subject as a matter of both practical and theoretical concern. To this end, three main issues will be addressed. First, in order to ascertain the number of people affected by this behaviour, the research literature pertaining to the prevalence of child sexual abuse (CSA) will briefly be reviewed. Second, a review of the immediate and long-term effects of CSA will be presented. The final part of this chapter will summarise the key issues and set the agenda for the remainder of the thesis. Before these issues are addressed, however, it is necessary for child sexual abuse to be defined.

1.1.1 Definition of Child Sexual Abuse

It is apparent from the CSA research literature that there are nearly as many definitions of child sexual abuse as there are research studies investigating the

---

\(^1\) Throughout this thesis, the term 'perpetrator' will be used to refer to those individuals who carry out the sexual abuse of children, although it is recognised that several words could be used in this context.

\(^2\) 'Victim' of child sexual abuse will be the term used to refer to those individuals who have experienced sexual abuse as children. This is not necessarily intended as an indication of passivity during the event.
phenomenon. No one definition can be regarded as the "correct" one as they differ according to the research question under investigation. The nature of these definitions and the consequences of this variation are described in detail in Section 1.2.1.1 below. However, it is appropriate at the start of this thesis to provide a definition to set out the area of human behaviour under consideration. The definition given below is taken from the Department of Health document, "Working together to safeguard children" published in 1999. It contains many aspects of sexually abusive behaviour that are in common with other definitions and therefore represents an appropriate working definition. Child sexual abuse is defined as follows:

"(Child) sexual abuse involves forcing a child or young person to take part in sexual activities, whether or not the child is aware of what is happening. The activities may involve physical contact, including penetrative (e.g. rape or buggery) or non-penetrative acts. They may include non-contact activities, such as involving children in looking at, or in the production of, pornographic material or watching sexual activities, or encouraging children to behave in sexually inappropriate ways.

(Section 2.6, page 6)

One of the key aspects to draw out of this definition is that the behaviour is carried out for the benefit of the perpetrator, not of the child. There is an abuse of power in the way the perpetrator relates to the child. The child is often very aware of this, but even if they are not, such behaviour still remains abusive.

Having defined child sexual abuse, therefore, it is necessary to establish that research looking at this behaviour is both necessary and timely.

1.2 Prevalence of child sexual abuse

Perhaps the first step in demonstrating the value of investigating the subject of CSA is to establish the extent of the problem. Although the incidence of child sexual abuse
has been measured within the research and clinical literature, the extent of the problem has generally been estimated by means of the exploration of prevalence: the proportion of a population who have been victims of such an experience at some time in their lives. One of the main problems with quoting incidence statistics, (i.e. the number of new cases in a given time), is that victims are often reluctant to report their abusive experience soon after it has occurred. This may be for a variety of reasons including the guilt and shame they may feel as well as the age, and hence power differential often associated with such abuse (Peters, Wyatt & Finkelhor, 1986). Thus a simple summation of all reported victims of abuse in a given year is unlikely to provide a representative figure for the actual amount of childhood victimisation that has occurred.

There have been many attempts to obtain a definitive figure for the prevalence of child sexual abuse for both girls and boys. The vast majority of these studies were conducted in the 1980’s and early 1990’s in the United States. In their relatively recent review of prevalence studies, Dhaliwal, Gauzas, Antonowicz and Ross (1996) cited the range of reported prevalences as being between 7% and 53% for females and between 3% and 37% for males.

It should be noted that the prevalence rates found in these studies varies widely. This is due to a number of factors, including the definition of sexual abuse employed and the nature of the sample. These are discussed in detail below in Section 1.2.1.

The ranges quoted above are confirmed in two reviews by Pilkington & Kremer (1995a; 1995b) who helpfully separate the studies according to the samples employed. They found that in community samples, rates varied between 6% (Burnam, 1985) and 62% (Wyatt, 1985) for females and between 3% (Burnam, 1985) and 22% (Hamilton, 1929) for males. The ranges quoted for college (female: 8-50%; male 5-30%) and clinical samples (female: 10-90%; male 5-26%), excluding ‘incest only’ definitions appeared slightly higher, although this assessment may not be apparent from the ranges quoted here and has not been confirmed statistically.
Prevalence studies in the United Kingdom were comparatively rare whilst these US studies were being conducted. However, UK rates of child sexual abuse quoted in the reviews by Pilkington & Kremer (1995a; 1995b) and in other papers indicate a similar range of results to those in the US. Prevalence estimates for community samples range between 9% (Bifulco, Brown & Adler, 1991) and 59% (Kelly, Regan & Burton, 1991) for females and between 9% (Baker & Duncan, 1985) and 27% (Kelly et al., 1991) for males.

Two studies with college samples, both all-female, reported apparently high rates (31%: Callam & Slade, 1989; 55%: Nash & West, 1985) although whether these were under or over estimates is unclear as these studies were subject to high refusal rates. The prevalence rates from UK clinical samples, excluding ‘incest only’ definitions, range between 17% (Sheldon, 1988) and 50% (Palmer, Chaloner & Oppenheimer, 1992). Samples were all female and attended clinics for psychological problems, e.g. eating disorders.

More recently, the NSPCC recently conducted the first UK study to assess the prevalence of all types of maltreatment, both within and outside the family, employing a large random probability sample of the general population (Cawson, Wattam, Brooker & Kelly, 2000). They interviewed 1,235 men and 1,634 women between 18 and 24 years old, who were randomly selected from the Postcode Address File. This would have excluded individuals who were living in institutional settings such as prisons, large hostels and hospitals or homeless persons. A computerised questionnaire was used, in which interviewees indicated on the screen whether they had experienced a range of behaviours before they were 16 years old. These included contact and non-contact sexual behaviours. If they had, they were asked whether the events involved individuals older than them by five years or more or had occurred against their wishes. Further questions were also asked including the participant’s age, and their relationship to the other person. The incident was classified as abuse (either contact or non-contact) if any one of three circumstances applied: the other
person was their carer or parent; the behaviour had been against their wishes; or if the act was consensual but they were 12 or under whilst the other person was five or more years older than them. This study found that 16% of females and 7% of males had experienced some form of contact sexual abuse, whilst 21% of girls and 11% of boys had been subjected to non-contact forms of abuse. There were, of course, some individuals who had experienced both contact and non-contact abuse.

It should be noted, at this point, that recent research in the United States (Jones & Finkelhor, 2001) has indicated a gradual yearly decline in the number of substantiated cases of CSA from an estimated 149,800 in 1992 to 103,600 in 1998. This represents a decrease of 31% over these six years. There has also been a decrease of 26% in the number of reported CSA incidents, from 429,000 in 1991 to 315,400 in 1998. The authors suggest that two factors may have contributed to this decline: a genuine underlying decrease in the number of CSA incidents; a change in the attitudes, policies and standards of those likely to either report or substantiate such cases.

The first explanation represents a more optimistic view, that as a result of several factors including the increase in public awareness, prevention programmes, and the incarceration and treatment of offenders, incidents of sexual abuse have diminished. The second set of explanations reflects a more sinister undercurrent. Several factors other than the first explanation could account for a reduction in reporting or substantiation of CSA. These include: the 'child abuse backlash' where victims are reluctant to report CSA whilst the public perception is that many reports represent 'false allegations'; the drying up of the 'reservoir' of pre-1980 unreported cases which previously boosted the number of reports; screening policies of agencies may have become tighter to screen out less serious cases. It is likely that some combination of these explanations accounts for the reductions in reports and substantiations of CSA cases described above, although further research is needed.

The extent of the problem of child sexual abuse is also indicated by criminal convictions data. In his research for the Home Office, Marshall (1997) estimated that
at least 110,000 men of 20 years or more had a conviction for a sexual offence against a child. This figure was calculated on the basis of the proportions of five male cohort samples, born every five years between 1953 and 1973, who had been convicted of sexual offences. These proportions were multiplied by the known male population in 1993, who had been born between the one cohort and the next. For example, 0.6% of the 1958 cohort had been found to have a conviction for a sexual offence against children by 1993. In that year there were 1,744,000 males aged 35 to 39, which, when multiplied by 0.006 gives an estimate for the number of males of this age who had child sex offence convictions (approx. 11,000). The products for each 5 years age group and the final group (40 years and above) were then summed to give the 110,000 figure quoted above.

Applying a proportion based on a sample born in one year to a population born over five or more years is clearly subject to error, although it is hard to say whether the absolute total is likely to be an over or under estimate. It is worth noting, however, that any estimation of the extent of a problem based on conviction data is likely to be an under estimate, given the likelihood that a large proportion of criminal behaviour may go undetected and the difficulties inherent in prosecution lawyers proving a defendant’s guilt.

It appears, therefore, that whilst taking note of the research suggesting a recent decline in CSA cases, this behaviour still represents a substantial problem both in terms of the number of individuals perpetrating such activities, and in terms of the number of either gender who have been affected by them.

1.2.1. Factors accounting for variation in prevalence rates

It was noted above that many of the reviews of prevalence studies have find wide variation in the prevalence rates reported. Several factors may account for this large variance. Some of these factors relate to estimates made for both sexes (Peters,
Wyatt & Finkelhor, 1986) whilst others are more gender-specific. Below are described first those factors which apply broadly, followed by issues that are particularly relevant to the estimate of prevalence in males (Watkins & Bentovim, 1992).

1.2.1.1 Definition

Probably the single most important factor explaining the variance in estimates of CSA prevalence is the nature of the definition of ‘child sexual abuse’ that is employed. The three main constituents that account for the variations in definition are: the type of behaviours that are included, the relative ages of victim and perpetrator, and the actual age of the victim. Researchers may select different criteria for one or more of these constituents.

With respect to the type of behaviours, studies differ in whether non-contact forms of abuse are included, such as voyeurism, exhibitionism or verbal propositions. The effect that inclusion of non-contact behaviours can have on the resultant estimate of prevalence is illustrated by the studies of Russell (1983) and Wyatt (1985) who reported prevalence estimates that both included and excluded non-contact abuse. When prevalence estimates from both studies were calculated using Russell’s definition they were very similar, with rates of sexual abuse excluding non-contact behaviour for the two different ages being on average 14.5 % lower than those including such behaviour (see Table 1.1).

Table 1.1: Prevalence of sexual abuse in females including and excluding non-contact behaviour

<table>
<thead>
<tr>
<th></th>
<th>Excluding non-contact</th>
<th>Including non-contact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>up to 13yrs (%)</td>
<td>up to 17yrs (%)</td>
</tr>
<tr>
<td>Wyatt (1985)</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>Russell (1983)</td>
<td>28</td>
<td>38</td>
</tr>
</tbody>
</table>
Studies also vary with respect to their definition of an ‘inappropriate’ age difference for two individuals between whom a sexual act has occurred, when at least one of them is a child (under 16 years). Given the different age limits set by separate studies, it is possible that the same sexual act could be considered normal behaviour in one study, and childhood sexual abuse in another. When the younger party is very young (e.g. under eight years) and the partner is over 18 years, studies are consistent in classifying this as CSA. However variance in such classifications is much wider when the difference in age between the two parties is less than five years and the age of the younger individual is closer to 16 years. This is an important consideration since a person’s first experience of consensual intercourse is often during adolescence (Wyatt, 1984).

In addition, studies differ regarding the age up to which a person can be considered a victim of CSA (i.e. in their definition of ‘childhood’). For example, in the study by Wyatt (1985) subjects were still classed as children at the age of 17 years. Hence, any events occurring to individuals aged 17, which also met the other criteria for CSA, would have been included in the prevalence estimate. Other studies have been slightly more restrictive and not only excluded all events when the subjects were 17, but also stipulated that if the individual was 12 years or under there had to be a five year difference in ages. This difference rose to 10 years if the victim was aged 13 to 16 years (e.g. Finkelhor, 1979; Fromuth, 1983). These age criteria have contributed to considerable variance in prevalence rate estimates. If the criteria used by Finkelhor were applied to Wyatt’s results, Wyatt’s prevalence estimates would drop from 62% to 54% (Wyatt & Peters, 1986).

To summarise, the difference in the definitions of CSA in prevalence studies has been an important contributor to the wide variation in prevalence estimates that have been reported. Indeed, Gorey and Leslie (1997) found in their review of 16 prevalence studies that differences in definition accounted for the greatest variance in prevalence figures. It should be noted, however, that such differences represent only one possible
cause of this variance. Another possible cause, the methodology employed in the
study, will be described in the next section.

1.2.1.2 Methodology
A second consideration relating to the variance produced in prevalence estimates of
CSA is the methodology employed in the course of the study. Several aspects of
methodology including sampling technique, response rate and administration method
are believed to affect prevalence estimates (Peters, Wyatt & Finkelhor, 1986).

There are broadly two types of sample used in CSA prevalence research: probability
and non-probability samples. The former, being a random community sample, is more
representative of the general population. Therefore, the resultant prevalence estimate
is generalisable to that population. However, there remains considerable variance in
prevalence estimates produced using this technique (e.g. 6% Burnam, 1985; 62%
Wyatt, 1985). Non-probability samples are selected from discrete groups, usually
college students, and the resultant prevalence estimates are fairly homogeneous,
typically falling between 11% and 22% (Peters et al., 1986). This may also be
because most of these studies use the same questionnaire, definitions and mode of
administration as Finkelhor (1979).

It is possible that a low response rate in a particular study could affect the prevalence
estimate that was found. If a higher proportion of victims of abuse tend to include
themselves in prevalence surveys than do non-victims, an overall low response rate
would have the effect of producing a prevalence estimate with an exaggerated value.
Alternatively, if victims of abuse tend to want to exclude themselves from such
studies more than non-victims do, a low response rate would have the effect of
producing an unrealistically low prevalence estimate. The results of the review by
Gorey and Leslie (1997) indicate that victims of abuse are more likely to take part in
such surveys. They found that for females, higher response rates resulted in
significantly lower prevalence estimates (p<.05), whilst for males a similar result
approached significance (p<.10). The importance of this finding is emphasised by the
fact that many such prevalence studies have poor response rates. Just over one half of
the studies reviewed by Gorey and Leslie (1997) had response rates of lower than
60%.

Two further methodological factors that appear to affect prevalence estimates are the
nature of the questions asked, and the mode of administration. All prevalence surveys
have used at least one screening question to establish whether or not the respondent
was sexually abused. However, it has been suggested from the analysis of a series of
14 studies that the estimated prevalence estimate is higher the more screening
questions are asked (Peters et al., 1986). Six studies in which only one question was
asked produced a range of prevalence estimates between 6% (Burnam, 1985) and
22% (Bagley & Ramsay, 1986). In a further six studies, between two and four
different questions were asked about the subject's experience of sexual abuse and
these produced estimates between 11% (Seidner & Calhoun, 1984) and 34%
(Badgley et al., 1984). Furthermore, the two studies asking more than 4 questions
both had estimates over 50% (Wyatt, 1985; Russell, 1983).

In their assessment of this collection of 14 studies, Peters et al. (1986) also found that
the type of question asked appeared to affect the outcome estimate. General
questions asking only if the individual had been abused and that did not specify a
definition tended to produce lower estimates (range 6-14%). However, the range of
prevalence estimates produced by behaviour specific questions was between 11% and
62%.

It is important to recognise that because of the small number of studies that were
analysed, there is a limit to the conclusions that can be drawn from such figures. In
addition, one would expect the number and type of questions asked to co-vary. If a
high number of questions were asked, it is likely that they were specific rather than
general questions. There is also a limit to the number of general questions you can
ask about the same subject before becoming more specific. Hence differences in the
number and type of questions asked may account for the same portion of variance in CSA prevalence figures.

There are clear reasons why asking specific questions is more likely to yield positive reports of child sexual abuse. First, they reduce the risk of false negatives, which can occur if the subject uses a less inclusive definition of CSA than the experimenter. Second, descriptions of possible events provide more memory cues for the subject, making it more likely they will recall such events if they occurred. Third, asking more questions takes longer, allowing the interviewee additional time to recall their experiences.

The final methodological factor analysed by Peters et al. (1986) was the effect of the mode of administration employed in the 14 prevalence studies. The three techniques used were: self-administered questionnaires (SAQs) (seven studies); face-to-face interviews (FFI) (four studies), and telephone interviews (TI) (three studies). Peters et al. (1986) suggested it was possible to perceive a trend in the relationship between mode of administration and prevalence estimate, with FFIs being most likely to produce high estimates. However no statistically significant relationship was evident.

In addition, the studies featured in the Peters et al. (1986) review also differed with respect to a number of other relevant variables (e.g. response rate, CSA definition), which might have accounted for any differences in prevalence estimates. The review by Gorey and Leslie (1997) used regression techniques to partial out the effects of these variables before assessing the contribution to prevalence estimates made by the mode of administration. They found that once response rates and definitional differences were controlled for, the mode of administration did not add significantly to the prediction of prevalence estimates.

To summarise, there is some evidence that certain aspects of the methodology employed by researchers are likely to affect the estimates of prevalence produced. These include the sampling technique (probability vs. non-probability sample), the
nature of the questions asked (general vs. specific) and the response rate of the population sample. However, the mode of administration (SAQ’s, face-to face or telephone interviews) does not appear to have a consistent effect on the resultant estimate of prevalence.

1.2.1.3 Sample Characteristics

The third major factor accounting for variance in estimated rates of prevalence is the differing characteristics of the groups being assessed. It is possible that at least part of any variance in prevalence estimates between two separate samples could be accurately reflecting genuine between-sample differences in the prevalence of sexual abuse. Even if two studies applied the same definitions and used identical methodologies, the prevalence estimates could still be at variance if the samples were taken from populations that had different characteristics. For example, it has been suggested that variables such as age, educational level, ethnicity or geographical region might affect prevalence in some way (Peters et al., 1986) and early studies seemed to support these as relevant factors (De Francis, 1969; Finkelhor, 1979; Lewis, 1985). For example, research by De Francis (1969) and Peters (1976) suggested that children from ethnic minorities made up the majority of CSA victims, whilst Lewis (1985) found that the prevalence estimate for the Pacific region, i.e. California and Washington State, was significantly higher (38%) than that for other regions of North America (26%).

Subsequent evidence, though, contradicts these initial findings and on balance it indicates that none of the sample factors mentioned above affects the recorded estimates of prevalence (Badgley et al., 1984; Russell, 1986; Wyatt, 1985). The brief review by Peters, Wyatt and Finkelhor (1986) also suggests that the research to date has not been appropriately designed to make it easy to draw firm conclusions about sample characteristics. For example, with regard to the effect of ethnicity, few studies have compared equally sized samples of minority and non-minority populations, typically having a much larger non-minority group. This is of course more representative of the general population, but is not helpful when comparing
prevalence estimates between these two groups. Also, economic status is rarely taken into consideration when these comparisons are made, and this may constitute a confounding variable.

1.2.1.4 Prevalence of CSA in Male Samples

Although the majority of studies reviewed above focused on female subjects, most of the factors that affected the variance in these prevalence estimates also apply to studies of male populations (Urquiza & Keating, 1990). However, there are particular issues affecting the study of sexual abuse in males that warrant some mention.

It has been suggested that male sexual abuse is concealed to a greater extent than female abuse, and hence that males under-report their sexual victimisation (Vander Mey, 1988). This is supported by evidence from a study by Widom and Morris (1997). They approached a number of adult males (N=19) and females (N=75) whom they had previously identified as childhood victims of sexual abuse from court records dating from 1967 to 1971. Widom and Morris then asked the subjects about their maltreatment histories, without revealing that they had access to information about these events contained in the contemporaneous court records.

The subjects’ reports of their sexual victimisation were established in four different ways: by asking the subjects if they had experienced at least one sexual experience before the age of 12 (ranging from sexual suggestion to sexual intercourse); by asking the subjects if they considered that these events had constituted sexual abuse; by asking if they had experienced a sexual act before the age of 12 with someone who was at least 10 years older than them; by asking if anyone had bothered them sexually or tried to have sex against their will.

The results suggested that although there was considerable under-reporting by both genders, males were more likely to under-report than females. The rate of under-reporting differed depending on the method used to establish victimisation, but the
rate was consistently higher for boys (ranging from 67.9% to 100%) than for girls (32% to 60%).

There are several reasons why males might under-report more than females. First, boys are often brought up to believe that self-reliance is an important constituent of masculinity (Finkelhor, 1984). Any disclosure of sexual abuse might be perceived as an appeal for support, which would undermine feelings of self-reliance. Second, boys who have suffered sexual abuse by a male are frequently concerned about any effect it may have on their sexual orientation. As such, they are unlikely to reveal it to others. In addition, it is possible that the sexual abuse of boys may be perceived, including by boys themselves, as less damaging than that of females. For example, if abused by a female, a boy is likely to be regarded as ‘lucky’ (Dimock, 1988).

Many researchers (e.g. Sudman & Bradburn, 1982) espouse the use of more anonymous methods of data collection with males, (i.e. telephone interviews or self-assessment questionnaires). Urquiza and Keating (1990) suggest that men, given their natural reluctance to expose themselves to accusations of vulnerability or weakness, would be less willing to admit their own abuse in a face-to-face situation. The anonymity assured by a telephone interview may result in a higher level of disclosure by males.

There are, therefore, specific considerations to take into account when attempting to assess the prevalence of CSA amongst males, particularly in relation to their willingness to disclose.

1.2.1.5 Summary
There are wide variations in the prevalence estimates that have been established to date for the sexual victimisation of both females and males, ranging between 7% and 57% for females and between 3% and 37% for males (Dhaliwal et al., 1996). These are probably due to differences between the studies in the definition of CSA used, the
methodology employed and the characteristics of the samples studied. In addition there are particular difficulties in establishing accurate prevalence estimates for male populations owing to particularly high rates of under-reporting.

Despite such difficulties, it is apparent that childhood sexual abuse affects a significant number of people, including males. In the next section, the evidence for the immediate and long-term consequences of CSA for its victims will be described.

1.3 Effects of childhood sexual abuse

There is an implicit assumption driving the sexual abuse literature that the experience of CSA is sufficiently serious and important to have certain negative effects. A large number of studies have attempted to ascertain the effects of childhood sexual abuse, and there have been many reviews of this literature (Beitchman, Zucker, Hood, DaCosta & Akman, 1991; Kendall-Tackett, Williams & Finkelhor, 1993; Neuman, Houskamp, Pollock & Briere, 1996; Rind, Tromovitch & Bauserman, 1998; Rind & Tromovitch, 1997; Urquiza & Capra, 1990). Typically, the reviews can be divided depending on whether they focus on initial effects or long-term effects, although some refer to both. Initial effects are those that become apparent whilst the victim is still a child or adolescent, whilst long-term effects are those outcomes identified in adulthood as being linked to the CSA experience.

The studies that have been reviewed are broadly consistent in terms of the outcomes they describe, both for adults and children. Below is a list of some of the typical mental health problems that have been linked to a childhood experience of sexual abuse. Although they have been categorized as either 'initial' or 'long-term' effects, many of these symptoms could be placed in both categories.
Table 1.2: Reported initial and long-term effects of Child Sexual Abuse

<table>
<thead>
<tr>
<th>Initial effects</th>
<th>Long-term effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive behaviour</td>
<td>Alcohol abuse</td>
</tr>
<tr>
<td>Sexualised behaviour</td>
<td>Sexual dysfunction</td>
</tr>
<tr>
<td>Eating disorders</td>
<td>Low self-esteem</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Depression</td>
</tr>
<tr>
<td>Suicidal behaviour</td>
<td>Psychotic symptoms</td>
</tr>
<tr>
<td>Dissociation</td>
<td>Social adjustment problems</td>
</tr>
<tr>
<td>Obsessive-Compulsive disorder</td>
<td>Somatisation</td>
</tr>
<tr>
<td>Constipation</td>
<td>Paranoia</td>
</tr>
<tr>
<td>Encopresis</td>
<td>Phobias</td>
</tr>
</tbody>
</table>

Urquiza & Capra (1990) and Green (1993) have reviewed both initial and long-term effects on males and in both, they grouped the studies they reviewed in terms of broad symptoms, e.g. emotional reactions, effects on sexuality. Beitchman et al. (1991) on the other hand described the differing initial symptoms that are manifest in both male and female victims, according to their age group: preschool, school age and adolescents.

The former approach is the one that will be adopted in the following brief synopsis of the literature on the effects of CSA. A review of the main reported effects, both initial and long-term, will be followed by a critical analysis of the cited research. There has recently been a move towards research with a more rigorous methodology. A number of these studies will therefore be described including aspects of their design that inspire more confidence in their conclusions.

1.3.1 Initial effects of CSA

The initial effects of sexual abuse that have been identified to date will be outlined below. Symptoms will be grouped together according to broad categories. This will
include a description of symptoms related to externalised behaviour, sexual behaviour and sexuality, emotional and physical well-being.

1.3.1.1 Externalised behaviour
One of the most commonly reported effects of sexual abuse in boys is their subsequent externalised behaviour. In particular, boys who are victims of CSA can become aggressive, disturbed, non-compliant or delinquent (Friedrich, Beilke & Urquiza, 1988). This appears at all ages of victim, and at no one age significantly more than at the others (Beitchman et al, 1991).

1.3.1.2 Sexual behaviour and sexuality
Also described at all ages are effects on the victims’ sexuality. Two studies (Gale, Thomson, Moran & Sack, 1988; Goldston, Turnquist & Knutson, 1989) found more inappropriate sexual behaviour in groups of sexually abused preschoolers than in non-abused controls. This pattern is also reported in school age children (Deblinger, McLeer, Atkins, Ralphe & Foa, 1989) and adolescents (Johnson & Shrier, 1985; Sansonnet-Hayden, Haley, Marriage & Fine, 1987). With adolescents, however, sexual disturbance is manifest as non-organic sexual dysfunction or a greatly elevated prevalence of homosexuality (48% vs. 8%) and bisexuality (10% vs. 3%) over non-abused controls. The findings about former victims’ sexuality were more robust in males than in females (Beitchman et al., 1991).

These results must be viewed with caution, however, as there are alternative interpretations. First, as the majority of homosexuals have never been sexually abused (Bell & Weinberg, 1978), there may be an additional factor that accounts for both sexual abuse and a homosexual orientation. Alternatively, it is possible that latent homosexuality may increase an individual’s risk of being abused rather than being abused leading to homosexual orientation. Perpetrators with a preference for same-sex victims may be more likely to abuse children who themselves are more open to adults of their own gender.
In addition to there being alternative explanations for these results, there have also been studies that have made contradictory findings. For example, research by Gilgun and Reiser (1990) and Bell, Weinberg and Hammersmith, (1981) found no association between child abuse and homosexuality.

1.3.1.3 Emotional effects
With respect to further initial effects, researchers report that victims suffer a number of possible emotional reactions. Sexually abused girls have been shown to have more severe depressive symptoms, greater numbers of suicide attempts and higher levels of dissociative symptoms (Cavaiola & Schiff, 1988) than non-abused psychiatric patient controls. Young male victims of all ages (preschool to adolescence) have been found to experience other emotional reactions as evidenced by high scores on certain subscales of the Achenbach Child Behaviour Checklist (Gomes-Schwartz, Horowitz & Sauzier, 1985). These indicate depression, somatic complaints and obsessive-compulsive behaviour as common initial outcomes for boys (Friedrich et al. 1986).

1.3.1.4 Physical effects
Finally, physical effects have also been reported. These include direct effects of the sexually abusive acts, such as anal penetration resulting in constipation or encopresis (Feehan, 1995, 1996; Morrow, Yeager & Lewis, 1997), as well as somatic complaints such as sleep disturbance (Adams-Tucker, 1982) and increased anxiety (Burgess, Groth & McCausland, 1981). It has been suggested that somatic complaints occur as a consequence of the inhibition of thoughts and feelings associated with the abuse (Pennebaker, 1989), although there is little evidence to support this hypothesis. Furthermore, there is a lack of evidence to show that the somatic outcomes described are specifically attributable to sexual abuse rather than other events that have occurred in the subjects’ lives.

1.3.1.5 Summary
A number of psychological and physical symptoms in childhood and adolescence have been linked to the experience of childhood sexual abuse. These include aggressive
and sexualised behaviour in children, sexual dysfunction in adolescents, dissociation, suicidal behaviour and obsessive-compulsive disorder, especially in boys. In addition, some physical symptoms have also been associated with sexual abuse such as constipation, encopresis and sleep disturbance. In the next section, adult psychological and physical symptoms, which have been attributed to childhood sexual abuse, are described.

1.3 Long-term effects of CSA

A range of long-term effects has been reported for both female and male victims of CSA. These are outlined below and, as with the initial effects, they are grouped together with related symptoms. These groups include the effects on sexual behaviour and sexuality, resultant substance abuse, depression and suicide.

1.3.2.1 Sexual behaviour and sexuality

It is generally agreed that experiencing CSA can have an effect on an individual's sexuality. Frequently reported is some form of sexual dysfunction in adulthood, but the specificity and types of problems have not been fully established (Dhaliwal et al., 1996). In males, studies have demonstrated significant differences between the number of victims and non-victims who had problems of compulsive sexual behaviour (Langevin, Wright & Handy, 1989) and prostitution (Olson, 1990), but most of the studies draw their conclusions from case histories only (Dhaliwal et al, 1996).

Evidence from case histories has also been used to suggest that male victims of CSA avoid intimate relationships or else they allow their partners (male or female) to become physically abusive (Bruckner & Johnson, 1987; Dimock, 1988; Krug, 1989). However, in a controlled study comparing male victims with non-victims, Fromuth & Burkhart (1989) found no significant differences with respect to whether the two groups were currently in a relationship, whether they had dated in the last month or their age when they started dating.
Probably all that can be concluded from research to date is that for both males and females, adults who have experienced sexual abuse as children typically report more problems of sexual dysfunction, more difficulties in intimate relationships and experience more sexual adjustment problems than do non-victims.

1.3.2.2 Substance abuse

Adult male victims of CSA have been reported to develop coping strategies that are thought to manifest themselves in the form of behaviours such as drug abuse (Stein, Golding, Siegel, Burnam & Sorenson, 1988), or displays of anger (Bruckner & Johnson, 1987). For example, Stein et al. (1988) found that a group of male CSA victims had significantly more alcohol (35.7% vs. 23.2%) and drug (44.9% vs. 7.8%) dependency than non-abused controls. However, there is considerably more evidence that no such difference applies (Brown & Anderson, 1991; Olson, 1990) and both Dhaliwal et al. (1996) and Urquiza & Capra (1990) have concluded that there is currently little support for the theory that male or female victims of CSA develop addictive behaviours as a direct consequence of their abuse, or as a way of coping with their abuse. Furthermore, evidence for increased levels of externalised anger is from case histories only and therefore lacks support from any statistical analysis, which would engender more confidence that there was a link between CSA and later substance abuse (Dhaliwal et al., 1996).

1.3.2.3 Depression and suicide

Adult depression is one of the more common symptoms found in adult CSA victims. For example, Briere, Evans, Runtz & Wall (1988) found that a group of adult male CSA victims had significantly higher scores on a depression subscale of the Trauma Symptom Checklist (TSC 33) than a group of non-victims. Of the eight studies reviewed by Beitchman et al. (1992) that pertained to CSA and adult depression, six reported an association between them (Gold, 1986; Gorcey, Santiago & McCall-Perez, 1986; Mullen, Romans-Clarkson, Walton & Herbison, 1988; Peters, 1988; Sedney & Brooks, 1984; Stein et al, 1988). The other two studies reviewed
contained methodological anomalies, which may account for the lack of association (Fromuth, 1986; Murphy et al. 1988). However it should be noted that these eight studies were carried out with all female samples.

A number of studies have attempted to show an association between suicidal behaviour and CSA (Bryer, Nelson, Miller & Krol, 1987, cited in Beitchman et al., 1991). In a study by Briere and Runtz (1986) of clients at a counseling centre, previous suicide attempts were found to be in the histories of 56% of 133 female CSA victims, compared with 23% of 62 non-abused women. Subjects’ suicidal behaviour at the time of the study was found to be associated with the total number of perpetrators that had abused them, as well as the additional presence of physical abuse. The number of previous suicide attempts was only associated with additional physical abuse. Thus, although individuals who have been maltreated in childhood appear significantly more likely than non-maltreated individuals to attempt suicide (Briere & Runtz, 1986), it cannot be concluded that the experience of sexual abuse in childhood per se, (i.e. in isolation from other forms of maltreatment), increases the likelihood of suicidal behaviour.

1.3.2.4 Summary

Described above are some of the symptoms, occurring in adulthood, that have been linked with childhood sexual abuse. These include sexual dysfunction, compulsive sexual behaviour, alcohol and drug abuse, depression and suicide. However, some of the methodological features of the majority of these studies make clear conclusions impossible to draw from their results.

In the next section, some of these methodological flaws will be described, together with more appropriate designs from which more solid conclusions may be made. The findings from subsequent research that has employed these techniques will also be reported.
1.3.3 Methodological considerations

From this brief summary of what is a vast literature, it should be clear that a large number of maladaptive outcomes of CSA have been reported. However, the methodology employed in the majority of these studies has been inappropriate to demonstrate the effects of sexual abuse on its victims. There are at least six common problems related to the research design of these studies: their retrospective nature; their failure to address the issue of co-occurring maltreatment and other relevant factors; inadequate sample sizes; their failure to examine the effect of the severity of abuse; the impurity of many samples, and a failure to demonstrate a plausible mechanism to account for the relationship between CSA and its effects. A number of the studies have even failed to demonstrate an association between CSA and the outcome they claim. These problems are described in turn below.

1.3.3.1 Retrospective design

The first significant problem lies in the fact that the overwhelming majority of studies that have been reviewed have employed a retrospective design. In order to demonstrate that a particular factor (e.g. CSA) is the cause of a particular outcome (e.g. low self esteem) it is necessary to establish that the causal factor occurred before the outcome. This is problematic when using a retrospective design, as accurately recalling the timing of events is particularly difficult at a distance. In addition, individuals might unknowingly (or knowingly) switch the timing of events in order to fit with their current interpretation. Thus, using the examples given above, even if an association was found between CSA and low self esteem, it could not be established for certain whether the CSA resulted in low self esteem or individuals with low self esteem were more likely to experience CSA.

1.3.3.2 Co-occurring maltreatment and other factors

A second problem is that many of the victims of sexual abuse are additionally exposed to other forms of maltreatment such as physical abuse, emotional abuse and neglect. For example, Mullen, Martin, Anderson, Romans and Herbison (1994) found...
that 15% of a group of CSA victims reported separate acts of physical abuse, nearly ten times more often than did non abused controls. It is possible that these factors, not the experience of sexual abuse, account for the particular outcomes under investigation, especially as they are also thought to have immediate and long-term effects on mental health (Sroufe & Fleeson, 1986).

In addition, there often exists what Mullen and his colleagues have referred to as a "matrix of disadvantage" (Mullen, Martin, Anderson, Romans and Herbison, 1993), which is comprised of family background factors that increase the likelihood of children who grow up in such an environment being sexually victimised. Being exposed to these factors, such as being from a family of low socioeconomic status or having an absent parent, may be the cause of any long-term effects in an individual rather than their experience of sexual abuse. Indeed, Friedrich, Beilke and Urquiza (1987) found that such family factors predicted the problem behaviour of sexually abused children more strongly than either the severity or duration of the abuse. In addition, Alexander (1992) suggested that differing insecure childhood attachment patterns, rather than CSA, account for the variability of adult psychological symptoms.

1.3.3.3 Inadequate or inappropriate samples
Methodological problems related to the make-up of study samples have also been highlighted (Dhaliwal et al, 1996; Urquiza & Capra, 1990). They include the fact that many studies provide merely anecdotal evidence or case histories, which do not make use of appropriate tests of significance (e.g. Burgess, Hartman, McCormack & Grant, 1988; Dimock 1988; Gilgun & Reiser, 1990). When larger samples have been employed, they are typically biased, being drawn from clinical populations or therapeutic communities.

In addition, some studies have failed to separate child subjects from adolescents or even adults when assessing the effects of their abuse. Thus they combine results from individuals who have widely different attitudes to abuse, different coping strategies
and even different abilities to remember what occurred. For example, Carmen, Rieker & Mills (1984) studied a sample that ranged in age from 12 to 88 years.

1.3.3.4 Severity of abuse
There is also a dearth of studies focusing on the severity, the frequency and the duration of the sexual abuse, which means it is difficult to identify what element of the abusive experience was most problematic, or at least was most associated with subsequent psychopathology. For example, an individual who had suffered a one-off experience of genital fondling may conceivably be included in the same CSA sample as someone who had been multiply abused, involving penetrative acts, over many years. This, of course, makes it more difficult to identify specific outcomes from specific types of maltreatment, owing to the heterogeneous nature of the abuse experienced by the victimised population.

1.3.3.5 No hypothesised mechanism
Finally, none of the studies described above have attempted to identify a mechanism that might link the experience of CSA to the outcomes they have investigated. This is an important requirement in establishing any causal relationship (Kazdin, Kraemer, Kessler, Kuper & Offord, 1997). Without a plausible mechanism, any association found between CSA and the outcome variables may simply be spurious.

Unfortunately, at least one of these criticisms applies to the vast majority of studies in this literature. Their findings are therefore met with due reservation. In more recent years, however, researchers have started to address some of the design issues described above. Studies adopting more appropriate methodologies have been conducted, from which more reliable conclusions may be drawn.

1.3.3.6 Recent improvements in prevalence research designs
The improvements that have been achieved in recent years include the use of meta-analysis to interpret previous research, the more frequent use of community samples
and controlling for the effects of co-occurring factors, both through the research design and by statistical techniques. These will be described below.

1.3.3.6.1 Meta-analysis

The first improvement relates, not to the design of recent studies, but to an improvement in the accuracy of the interpretations that can be drawn from all studies in this research area. There have recently been a number of meta-analyses of the long-term effects of child sexual abuse (Rind, Tromovitch & Bauserman, 1998; Rind & Tromovitch, 1997; Neuman, Houskamp, Pollock & Briere, 1996; Jumper, 1995). These have involved analyses of between 14 (Rind & Tromovitch, 1997) and 59 studies (Rind, Tromovitch & Bauserman, 1998) involving student, clinical and community samples.

As a result of the number of studies reviewed, effect sizes were calculated, which indicate the strength of the associations that had been reported in the constituent studies, analysed in these meta-analyses. These effect sizes are reported below.

Rind, Tromovitch & Bauserman (1998) examined 59 published and unpublished studies involving college samples, and calculated effect sizes and confidence intervals for the associations between CSA and a number of psychological outcomes. The results can be seen in Table 1.3.

Table 1.3 Effect sizes and confidence intervals for the relationship between CSA and various outcomes (Rind et al., 1998)

<table>
<thead>
<tr>
<th>Psychological outcome</th>
<th>Effect size (confidence interval)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol problems</td>
<td>.07 (.02 - .12)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.13 (.10 - .15)</td>
</tr>
<tr>
<td>Depression</td>
<td>.13 (.10 - .14)</td>
</tr>
<tr>
<td>Dissociation</td>
<td>.09 (.04 - .15)</td>
</tr>
<tr>
<td>Eating disorders</td>
<td>.06 (.02 - .10)</td>
</tr>
<tr>
<td>Hostility</td>
<td>.11 (.06 - .16)</td>
</tr>
<tr>
<td>Interpersonal sensitivity</td>
<td>.10 (.06 - .15)</td>
</tr>
<tr>
<td>Locus of control</td>
<td>.04 (-.02 - .09)</td>
</tr>
</tbody>
</table>

39
Obsessive-compulsive symptoms .10 (.06 - .15)
Paranoia .13 (.07 - .16)
Phobia .12 (.07 - .17)
Psychotic symptoms .13 (.06 - .15)
Low self-esteem .04 (.01 - .07)
Sexual adjustment .09 (.07 - .11)
Social adjustment .09 (.04 - .10)
Somatisation .10 (.06 - .12)
Suicidal ideation/behaviour .09 (.06 - .12)

The effect sizes reported in Table 1.3 above could all be regarded as small (Cohen, 1988).

Jumper (1995) analysed 26 published studies relating to 30 mostly female samples. Effect sizes were calculated according to the type of sample: student, clinical or community. These are reported in Table 1.4 below.

Table 1.4 Effect sizes (r) for associations between CSA and self-esteem, depression and other symptoms (Jumper, 1995)

<table>
<thead>
<tr>
<th>Psychological outcome</th>
<th>Community samples</th>
<th>Clinical samples</th>
<th>Student samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td>0.34</td>
<td>0.36</td>
<td>-0.02</td>
</tr>
<tr>
<td>Depression</td>
<td>0.17</td>
<td>0.34</td>
<td>0.09</td>
</tr>
<tr>
<td>Other symptoms</td>
<td>0.27</td>
<td>0.29</td>
<td>0.09</td>
</tr>
</tbody>
</table>

The figures in Table 1.4 represent low to medium effect sizes (Cohen, 1988).

The two other meta-analyses produced at best medium effect sizes. Rind and Tromovitch (1997) analysed seven studies involving national probability samples, containing both males and females. As a result of the small number of studies, overall effect sizes were calculated by gender. Small effect sizes were found for both males (r = .07) and females (r = .10). Neuman et al. (1996) examined 38 published studies and
found an overall medium effect size \( (d = .50) \) for the clinical samples they analysed and an overall small effect size for the non-clinical samples \( (d = .32) \).

Summary
The use of meta-analytic techniques, therefore, has indicated that the majority of reported effect sizes are 'small' for the associations between CSA and psychological outcomes, according to the criteria described by Cohen (1988). A few would be classed as 'medium' (e.g. self-esteem, depression), although these tended to be based on clinical populations where the relationship between CSA and adverse psychological outcomes would be expected to be higher.

It is likely that most of the effect sizes are low, at least partly as a result of the methodological problems with the studies that were examined in the meta-analyses. In addition to those problems already discussed within this section, these included the use of research instruments with unknown psychometric properties (Rind et al., 1998) and the possibility of under-reporting of sexual victimisation, especially by males (Widom & Morris, 1997). More definitive results about the relationship between CSA and psychological outcomes can be expected in the future when it is possible to conduct meta-analyses of studies in which these methodological problems have been addressed.

1.3.3.6.2 Community samples
A second improvement that has occurred in recent years, this time relating to the research design, has been the more frequent use of community samples, as identified in the review by Jumper (1995). This has reduced the potential biases inherent in sampling from other more restricted populations such as college or clinical populations. This step means that resultant findings can be applied with more confidence to the general population, where appropriate.
1.3.3.6.3 Controlling for other factors

A third improvement in more recent studies has involved attempts to control for the effects of factors that co-occur with CSA, in order to establish the specific effects of CSA. This has been facilitated by both research design and statistical methods. Research design methods have involved the use of appropriate control groups, exposed to similar maltreatment experiences and family background factors, but who were never victims of sexual abuse. Although control groups had sometimes previously been used, they often consisted of non-abused subjects (i.e. neither sexually, physically nor emotionally), which did not control for the effects of co-occurring maltreatment.

A particularly powerful statistical approach, applied in recent research, has involved the use of regression techniques. Here, the independent effect of CSA is assessed by partialing out the contribution of other variables, such as physical abuse or neglect. Thus the direct effects of experiencing CSA can be established, irrespective of whether the individual was subject to other maltreatment types.

It has been suggested that such regression techniques may be misleading by underestimating the effects of CSA (Briere & Elliott, 1993). The experience of CSA may negatively affect children's perception of their upbringing, as well as perhaps resulting in deterioration in family functioning. If the knock-on effects of these two factors are removed by means of covariation, considerable indirect effects of CSA on psychological processes may be lost. Despite this caveat, however, it is generally recommended that researchers employ regression techniques to establish the independent effects of CSA (Dhaliwal et al, 1996).

Although the amount of quality research using appropriate methodologies is limited in the CSA literature, there are a number of relatively recent findings that should be reported. For example, studies by Bifulco, Brown and Adler (1991), Peters (1988), and a series by Mullen and colleagues on a community sample in New Zealand provide strong evidence of specific long-term outcomes. Having found an association
between childhood sexual abuse and adult depression in a community sample of women, Bifulco et al. (1991) also found, by means of regression analysis, that this association remained over and above other stressful factors which accompanied the CSA, such as parental indifference, experiencing violence and institutional stays. Peters (1988) also employed regression to show that major depressive episodes were more common in adult female victims of CSA involving physical contact than in an adult group of non-contact CSA victims or a non-abused control group. This relationship remained significant when the effect of ‘maternal warmth’ was controlled for, which she had previously showed to have the strongest effect on whether or not depression occurred after CSA.

Other attempts to find the independent influence of sexual abuse over and above the effects of co-occurring variables include a series of studies by Mullen, Martin, Anderson, Romans and Herbison (1993; 1994; 1996). They looked for associations between certain family background variables which increase the likelihood of females falling victim to CSA, (e.g. parental separation, a non-nuclear family, lacking a close confidante), and a range of adult outcomes. These included psychopathology, sexual dysfunction, quality of relationships, self-esteem and variation in socioeconomic status. They employed regression techniques to separate out the specific effects and found that childhood sexual abuse did contribute independently to all the measures of psychopathology they used (being identified as a psychiatric case on the Present State Examination, suicidal behaviour, eating disorders, depression sub-scales of the GHQ) as well as sexual difficulties, sexual dissatisfaction, separation and divorce, and other interpersonal difficulties.

However, Mullen and his colleagues added a caveat that despite using regression as a statistical technique, in reality most CSA occurs alongside these other factors. In their study, abuse victims had more developmental disadvantages, owing to the presence of the background variables described above. Twenty-three percent of abuse victims grew up with three or more of these disadvantages as compared with only 7% of the non-victims. Most importantly, CSA victims who reported a maximum of one
concurrent disadvantage were no more likely to suffer adult psychopathology than non-sexually abused controls with similar disadvantage scores.

Mullen et al. also considered the effect of the severity of abuse and when the most severe cases (involving penetrative intercourse) with low disadvantage scores were assessed separately, they were found to be more likely than non-victims with similar disadvantage scores to have psychopathological symptoms. Thus it can at least be inferred from these studies that severe abuse has certain deleterious long-term psychological effects in women, as described above.

These findings were confirmed in a study by Brayden, Deitrich-MacLean, Deitrich, Sherrod and Altemeier (1995), who reported a significant negative association between CSA in females and subsequent general well-being in adulthood even after the variance accounted for by childhood nurturance and family demographic factors was removed. In addition, a similar association was found between CSA and physical self-esteem, (i.e. subjects’ perceptions of their own bodies).

It should be noted that most of the recent studies employing appropriate methodologies were conducted with all female samples. It is not possible definitively to extrapolate these findings to males, for whom there is less good evidence.

1.3.4 Summary

There appears to be reasonable evidence that for adult females, the possible outcomes of CSA are depression, suicidal behaviour, eating disorders, a poor sense of general well being, low physical self-esteem and for victims of severe abuse, further psychopathological symptoms. For men the current evidence for the link between CSA and psychological outcomes is less convincing. This does not mean, of course, that these associations do not exist. It suggests, instead, that there is a clear need for
studies with rigorous methodologies form which definitive associations can be established.

1.4 Conclusions

Given the prevalence of child sexual abuse and the number of possible negative effects, there is an urgent need to reduce the occurrences of CSA in the general population. There are two strategies that are currently employed to produce such a reduction. The first, known as primary prevention, involves educating children in self-protection and the avoidance of dangerous situations. The only alternative, known as secondary prevention, involves the treatment of identified sexual offenders to prevent them from offending again.

MacMillan and her colleagues (MacMillan, MacMillan, Offord, Griffith & MacMillan, 1994) reviewed 19 effectiveness studies of primary prevention programmes published between 1979 and 1993. Most of these studies assessed effectiveness by measuring the responses of the children during an interview that involved either role playing high risk situations or reading out vignettes. Some also collected data on how many of the children had disclosed abuse. According to their results, these educational programmes can improve children’s knowledge about sexual abuse as well as their safety skills. However there is no evidence to suggest that they can reduce the occurrence of CSA.

With regards to the effectiveness of secondary prevention techniques, methodologically rigorous assessments of treatment programs for child sexual offenders are rather thin on the ground. One study was found that randomly assigned offenders either to treatment programs or to non-treatment groups (Marques, Day, Nelson & West, 1993). Marques et al. (1993) found that although the treatment condition (7.9% recidivism) was marginally more successful in reducing recidivism than no treatment (10.0% recidivism), this difference was not significant. In addition,
these secondary prevention strategies have been found to be particularly ineffective for young perpetrators of severe abuse, who are more likely to reoffend than older or less serious offenders (Marshall & Barbaree, 1988).

It seems, therefore, that current prevention techniques have been relatively ineffective in reducing the prevalence of CSA. Rather than focussing on established perpetrators of sexual abuse, therefore, a more appropriate strategy to reduce the occurrences of CSA might involve preventing individuals who are thought likely to develop this behaviour from doing so in the first place. This could be a particularly valuable approach given the high number of individuals that offenders may victimise before their behaviour comes to light. It has been suggested (Widom, 1999) that one possible means by which this strategy could be implemented might involve the introduction of certain key protective factors into the lives of potential perpetrators, thereby reducing the likelihood of the development of this behaviour. Currently, however, it is not known what these factors are, nor even who might be at particular risk of becoming a perpetrator.

The focus of this thesis will therefore be on the identification of protective factors against the development of sexually abusive behaviour in individuals who would otherwise be at high risk of developing it. To achieve this, it will first of all be necessary to identify who these high risk individuals might be. Establishing risk factors for this behaviour will therefore also be attempted in the course of this research.

An important first step to inform the design of this research will be to develop an understanding of the processes by which individuals may become sex offenders. In the following chapter, therefore, the various theories that have been put forward to explain the development of sexually abusive behaviour will be explored, together with an analysis of the evidence that supports them. In subsequent chapters, those factors will be highlighted that have been identified in previous research as either risk or protective in the development of sexually abusive behaviour.
Chapter Two  Theories of the development of sexually abusive behaviour

2.1 Introduction

There have been several attempts to advance the theoretical understanding of the development of sexually abusive behaviour. The majority of the mechanisms proposed for this outcome involve some sort of progression from being a victim of sexual abuse to becoming a perpetrator. However there are also theories, for example involving previous exposure to pornography, which suggest that prior victimisation is not a prerequisite.

The purpose of this chapter is to review the main theories that account for the development of sexually abusive behaviour. This will involve an account of each theory as well as an analysis of the evidence that exists relating to it. The majority of theories that have been proposed involve the childhood sexual victimisation of the individual prior to the onset of his perpetrating behaviour, although other theories do exist that do not involve prior victimisation (e.g. pornography model; Marshall, 1988). Since the focus of this thesis is the continuity between victimisation and perpetration, attention will be focussed purely on those theories whose mechanisms include prior sexual victimisation.

Having summarised the evidence at the end of the chapter, an attempt will be made to draw together, within a meaningful framework, those theories for which reasonable support exists.

2.2 Theories involving prior victimisation

It is a popularly held view of clinicians and other professionals in the field of child protection that abusers were themselves once the victims of abuse (Egeland &
A number of mechanisms have been proposed that involve prior sexual abuse victimisation in the development of sexually abusive behaviour. Some of these theoretical models were described in a review of the literature by Garland and Dougher (1988) and these have been advanced in subsequent studies (e.g. Bagley, Wood & Young, 1994; Becker & Stein, 1991; Friedrich, 1988; Laws & Marshall, 1990), whilst others have proposed new hypotheses, (e.g. Benoit & Kennedy, 1992; Hilton, 1993; Marshall & Mazzucco, 1995; Weille, 1997). More recent reviews (e.g. Falshaw, Browne & Hollin, 1996, Freeman & Morris, 2001; Romano & De Luca, 2001) have helpfully drawn this myriad of models together. Before any of the mechanisms are described, however, it is necessary to outline the framework within which they will be evaluated.

Perhaps the first step in assessing the validity of any theory is to establish that relevant testable predictions can be made from it. Having briefly described the approach being taken, therefore, the analysis of each theory will start with an assessment of whether testable predictions can in principle be made within that approach.

The available evidence supporting these theories will then be described. If no evidence has yet been found for a particular theory, a discussion about how this might be achieved will be made. This would include not only whether it would be practically possible to provide such support but also if it would be ethically acceptable to do so.

Even if there is no ethical or practical means by which empirical support for a theory could be found, it may still be possible to provide evidence of its clinical utility. The fact that a theory could contribute to an effective treatment may give at least some indication that it could contribute to an explanation of the link between victimisation and subsequent perpetration. Thus, the effectiveness of the prevention strategies that have been derived from these theories will also be assessed, as a means of evaluating them.

In the course of the current review, therefore, an attempt will be made to assess the validity of various theories which attempt to explain the link between sexual
victimisation and subsequent perpetration. There are eleven theories described below and these have been grouped into four main categories. The first three theories have their origins within the psychodynamic approach although they represent different aspects of it. The second category consists of theories in which certain emotions are believed to play a considerable role: shame, intimacy and empathy. The behavioural and learning theories have been grouped together in the third category, and a more cognitive approach represents the fourth main approach. In the final section, models that have attempted to synthesise the various approaches will be assessed.

2.2.1 Psychodynamic based theories

There are three theories that might account for continuity between childhood victimisation and subsequent perpetration, which could be said to have their bases within a psychodynamic approach. Two involve some form of identification by the former victim with their childhood aggressor and these have been described together in Section 2.2.1.1. The third approach involves the idea that individuals can become 'fixated' with respect to whom they are sexually attracted to. This is described in Section 2.2.1.2.

2.2.1.1 Identification with the aggressor

Two hypotheses derived from the psychodynamic model were summarised by Garland and Dougher (1988), and are much quoted explanations for the development of sexually abusive behaviour in victims of sexual abuse. There are two processes described: identification with the aggressor (Seghorn, Prentky & Boucher, 1987) and identification followed by mastery (Stoller, 1975). The former process involves an emotionally neglected male identifying with his abuser as a result of receiving craved for attention from him. He may then behave like his abuser as an adult, rationalising his activities as a kind of service in providing attention to neglected children. The second theory also involves the victim of abuse identifying with his aggressor. However, it is suggested that as an adult he becomes the active perpetrator of a similar action in an attempt to gain mastery over his earlier passive experience (Prendergast, 1993).
These two psychodynamic formulations are suggested mechanisms for the process of a victim of abuse becoming an offender. However, applying these theories as they stand would not allow one to predict which particular mechanism a victim of abuse may follow in becoming a perpetrator. For example, it is not clear which emotionally neglected males who are sexually abused will rationalise their subsequent abusive behaviour, and which will perpetrate it in order to gain mastery. In addition, given it is unlikely that all such males do become perpetrators, there is no way of identifying which victims are at high risk of that outcome and which are not. Thus, these are theories that at present only have explanatory value when applied retrospectively to individuals already established as sex offenders.

Other predictions representing aspects of these theories could however be made which, if found to be correct, would provide some support. For example, it could be suggested that perpetrators of sexual abuse are more likely to have been neglected by their fathers than non-perpetrators. Although this has not been tested, Garland and Dougher (1988) quote research showing that sexual offenders against male children frequently report poor relationships with their fathers (Paitich & Langevin, 1976).

Another prediction might be that victims of extrafamilial sexual abuse who experienced concurrent neglect from their fathers would be more likely to identify in some way with their aggressors than sexual abuse victims who had not been exposed to such neglect. It could, for example, be established that more of one group, comprising subjects who had experienced both sexual abuse and paternal neglect, identified more with their aggressor than another group who would have only experienced sexual abuse. All other forms of abuse would need to be controlled for in such a design.

It can therefore be seen that predictions are possible from these theories, although as yet there is little or no empirical evidence to support them. However some support for the psychodynamic approach may be offered by the existence of treatment strategies, based on the principles of identification and mastery, which are aimed at preventing sexual abuse victims from subsequently offending, provided they are found to be successful clinical strategies. These may be aimed at former victims of
abuse who have already been convicted of sexual offences or simply victims who have not offended (Schacht, Kerlinsky & Carlson, 1990; Shay, 1992).

For example, when referring to the treatment of aggression in former victims of sexual or physical abuse, Kernberg (1994) stresses the need to manage their unconscious identification with both victim and victimiser. Other examples include Zamanian and Adams (1997) who studied the treatment of sexually abused boys using group psychotherapy based on psychodynamic principles. This involved a description of the treatment, the challenges encountered during it and some assessment of its effectiveness. However, this assessment merely comprised a descriptive analysis of outcome rather than any formal or standardised measures. Clients were thought to have a better sense of boundaries following treatment and to be more appropriate in their expression of affect. On the other hand, the authors also stated that little internalisation of the material had occurred, since aggressive methods of solving disputes were still used at the end of the course. However, this was cited as indicating a need for further periods of similar treatment rather than as evidence of the failings of the strategy employed.

In fact no formal analysis of psychodynamic treatment approaches was found in the current review of the literature. This is partly because many programs involve a multi-modal approach that may include psychodynamic principles as well as cognitive-behavioural aspects. The validity of a single theory cannot be assessed by treatment effectiveness studies of such programs, even if they employed the most appropriate measure of success, the analysis of offending behaviour (e.g. Giarretto, 1982). However, a more straightforward explanation for the lack of such analyses is that treatment effectiveness is rarely measured at all.

2.2.1.2 The ‘Fixated - Regressed’ Dichotomy
Another approach, which comes more broadly from psychodynamic theory, assumes that sexual offenders against children fall into one of two categories: ‘fixated’, or ‘regressed’ (Cohen, Seghorn & Calmas, 1969). Fixated offenders are those who have remained sexually attracted to children as a result of their failure to resolve certain key issues from their own childhood. A common issue for populations such as these is that they were sexually victimised themselves as children, although this theory
does not specify this issue as a pre-requisite for offending behaviour. It is hypothesised that the experience of certain trauma can have the effect of halting a child’s socio-sexual development, such that the relatively immature level attained before victimisation persists into adulthood (Simon, Sales, Kaszniak & Kahn, 1992). Attraction to children, more specifically attraction to boys, is therefore chronic arising from a narcissistic identification with their victims.

Regressed child molesters are typically attracted to women (Groth, 1978; Groth & Birnbaum, 1978; Groth, Hobson & Gary, 1982). However, under conditions of particular stress their sexual interest shifts and they begin to target girls. This is thought to be because their primary interest is in adult females. This change in focus is usually only temporary, and may depend on the level of stress experienced, although it is also possible that a permanent interest in girls is aroused.

The first prediction that can be made from this theory is that fixated offenders represent a distinct group that is independent of regressed offenders with different aetiologies, i.e. that this dichotomy is a valid typology for child molesters. A study by Simon et al. (1992) attempted to establish this by measuring the degree of fixation/regression of a group of child molesters. An ordinal measure of the characteristics of fixated and regressed offenders was used, as suggested by Groth’s (1978) description of the dichotomy.

For example, a primary sexual orientation towards children was considered by Groth (1978) to be one characteristic of fixated offenders. This was established for each subject ‘if there was no indication in the records of any present or past relationship with adults’ (p.214, Simon et al., 1992). In the absence of any record of such relationship the subject would score 0 for this characteristic, or 1 if there was a record of at least one. Characteristics of regression were scored 1 and those of fixation scored 0. By adding up each subject’s scores from the twelve characteristics, an index of fixation-regression was established.

The hypothesis that fixation and regression represented two sides of a valid dichotomy would have been be supported if the distribution of scores across the index had been bi-modal. However, the authors found that the subjects were
distributed in a continuous manner. One explanation for this is that the characteristics that define the concepts of fixation and regression require clearer operationalisation as they do not uniquely define group membership. There is certainly little evidence on the basis of these results that all offenders are either fixated or regressed.

An alternative explanation for these findings is that they, rather than the theory, are flawed. Although the characteristics for fixated and regressed offenders are taken from Groth's (1978) own dichotomous concept, the operationalisation of these characteristics is open to criticism. For example, a primary sexual orientation towards adults was assumed if there was an indication of a present or past relationship with an adult. This may represent a dangerous assumption, as it is possible that individuals of all orientations experiment in their sexual relationships.

However, evidence for the inadequacy of the 'fixated - regressed' dichotomy was found by Knight (1989). In attempting to apply these constructs to a sample of offenders, he found that a number of dimensions were confounded, including the style of offending, the extent of the offender’s paedophilic interest and the level of social competence achieved before the offending commenced (Knight, Rosenberg & Schneider, 1985). This indicated the multidimensional nature of the fixated-regressed concept, and Knight and his colleagues (Knight, Carter, & Prentky, 1989) consequently partitioned the dichotomy into three factors. These included the offender’s ‘degree of fixation on children’ and their ‘level of social competence achieved’ which respectively became the cores of the investigators’ new fixated and regressed categories.

These two dimensions were found to be completely independent on the basis of the distribution of a group of 177 child molesters in a cross tabulation of high and low fixation and social competence ($\chi^2 = 0, p = 1.0$). In addition, inter-rater reliability was established for this sample indicating there were no significant problems of confounds with these dimensions (Knight et al., 1989). Finally, the developmental antecedents for these dimensions were considered to be sufficiently different, thus supporting the notion that these are valid concepts (Prentky, Knight, Rosenberg & Lee, 1989).
It appears, therefore, that there may be some validity to the concepts of fixation and regression, provided they are appropriately and carefully defined. However, it is still necessary to establish evidence for the mechanisms by which individuals develop into fixated or regressed offenders and indeed, what these mechanisms are. For example, under what conditions do individuals exposed to sexual trauma in early life develop into ‘fixed’ offenders? Why do only certain individuals regress into child molesting under highly stressful conditions whilst others do not? These are questions that as yet have remained unexplored and yet are necessary to fully establish the validity of this concept and its potential usefulness in treatment.

2.2.2 Emotion based theories

Three further models that may have their bases in psychodynamic theory involve the experiences of certain emotions: ‘shame’, ‘intimacy’ and ‘empathy’. These are described in turn below.

2.2.2.1 Shame

The first of these models, proposed by Weille (1997), suggests that the experience of ‘shame’ plays a crucial role in the development of sexually abusive behaviour in former victims. Shame is regarded as forming a ‘central affective link’ between the experience of victimisation and later perpetration. The response of a victim to trauma is thought to be biphasic, involving an oscillation between psychological proximity (intrusion, hyper arousal) and distance (numbing) to/from the traumatic event (Terr, 1991). Weille hypothesised that shame is operative across both extremes of this biphasic response, and that this results in perpetrating behaviour.

Shame is seen as serving both adaptive and maladaptive functions. It is, first of all, a defence mechanism that protects an individual from the vulnerability experienced following victimisation by producing the urge to hide from exposure. However it is at the same time maladaptive in that by inhibiting disclosure the effects of the traumatic experience are fixed in the victim’s mind. Thus, in spite of shame having a protective function, the victim will attempt to escape the concurrent negative effects via secondary defensive processes. Weille suggested that two such possible defences
are rage and contempt (Morrison, 1989) and by projecting these onto others, victims obtain relief (numbing) from their own shame as well as a temporary ‘illusion of power and activity’. This is how shame is thought to provide an ‘affective bridge’ between victimisation and victimising.

The above description is a simplified representation of Weille’s theory. However it can be seen that there is a significant barrier to making testable predictions from such an approach. Specifically, it is not clear how shame is defined nor how it maps onto other established psychological constructs making it very difficult to measure. Hence any predictions identifiable from this theory would be very difficult to test.

However, if it were possible to measure shame, there are several predictions that could be made in assessing its relevance to the aetiology of paedophilic behaviour. For example, it would be possible to establish whether there was an association between victimisation and shame or between shame and perpetrating behaviour. Similarly it would be possible to determine whether shame actually contributed to the outcome of perpetration, or if the association was merely spurious.

Given that shame is not currently measurable in a standardised way, a possible way to assess its relevance would be to determine the success of treatment strategies based upon the shame hypothesis. It is clear that clinical applications of this theory do exist, and are employed to address what are thought to be the effects of shame, including sexual dysfunction, depression, addiction and the development of paedophilic behaviour (Friedman, 1994; Shapiro & Dominink, 1990; Vasington, 1989). Although many authors stress the importance of assessing the effectiveness of treatment, very few studies include such an analysis. No empirical assessments of the effectiveness of shame-based strategies were identified in the course of this review of the literature.

2.2.2.2 Intimacy theory

A further emotion based model was proposed by Marshall (1989) and is known as ‘intimacy theory’. This was an attempt to provide a broad explanation of sexual offending including the link between victimisation and perpetration. The theory hinges on the idea that the ability to form intimate relationships with other people is
largely dependent on early experiences of stable attachments with parents (Weiss, 1982). Marshall suggested that individuals who experience sexual abuse as children and who, as a result of poor parenting, have failed to establish secure attachment bonds with their parents are at risk of becoming perpetrators. Such individuals are more likely to experience the attention given by their abusers as a form of intimacy, albeit deviant in comparison to that provided to securely attached children. Indeed, it may be the only form of intimacy that they experience.

In adulthood these former victims are less able to form normal intimate relationships with peers and are therefore likely to seek intimacy in the only way they have learned: through sexual contact between adult and child, although of course in this case they take the adult role.

This approach has some similarities with the model involving ‘identification with the aggressor’, in that the victims who go on to perpetrate are thought to do so as a result of the attention provided to them by their abusers that was missing from their relationships with one or more caregivers. It might be possible to predict that those victims who were insecurely attached to their parents would be more likely to become perpetrators than those who had a secure attachment. However, to test this would necessarily involve an assessment of their parental attachments at the point of their victimisation, leading to a conflict between the ethical and the scientific integrity of the study. If a proportion of victims were found to have insecure attachments, thought to increase their likelihood of future offending, it would be ethically incumbent on the researchers to provide appropriate treatment to prevent this outcome.

One possible research design that circumvents such ethical problems is the ‘catch-up’ longitudinal design (Robins, 1966). By following up individuals who had been sexually abused in childhood and from whom additional relevant data had been collected contemporaneously, the researcher could establish which aspects of this early data predicted the outcome of perpetration. One considerable problem would be finding a large enough group of former abuse victims whose attachment classifications had been assessed in childhood. A further problem would be making a valid assessment of their perpetration status.
The most viable possibility would be to follow up a sub-group of individuals from a large longitudinal cohort that had been set up to address different research questions, but which had gathered data on sexual abuse status as well as attachment classification. A sexually abused sub-sample could then be followed up to establish which individuals had subsequently become perpetrators of such abuse. However, it is not known if any large longitudinal study has collected these data. Thus, in practice, a catch-up longitudinal design is unlikely to provide supporting evidence for intimacy theory.

A further problem exists with intimacy theory, relating to its predictive validity (Ward, Hudson & Marshall, 1996). No mechanism has been identified describing the link between insecure attachments in childhood and problems of intimacy in adulthood. Nor is it clear which type of insecure attachment style (e.g. anxious/ambivalent, avoidant) would have a stronger association with adult perpetration. As is the case with the psychodynamic theories, it is apparent that intimacy theory alone does not allow the prediction of which victims of abuse go on to become perpetrators.

However, some support for the intimacy model has been found by Ward et al.(1996), who investigated the nature of attachment relationships in four different groups of incarcerated offenders: child molesters, rapists, and violent and non violent non sex offenders. On the basis of Marshall’s theory, they hypothesised that the sex offenders would be likely to have experienced insecure attachments as children and would therefore be less able to form intimate adult relationships. As expected, they found that 78% (66) of the 85 sex offenders were insecurely attached based on the Relationship Questionnaire (Griffen & Bartholomew, 1991). However this was also the case for the non sex offenders, of whom 82% (51/62) were insecurely attached. Thus, the most that can be said from this study is that insecure attachment may, in a general way, be associated with anti social behaviour, not sex offending in particular.

Additional evidence for this model was found by Seidman, Marshall, Hudson and Robertson (1994), who compared the levels of intimacy experienced by the following groups of males in their long standing sexual relationships: adult rapists,
incestuous and non incestuous child molesters, violent non sex offenders, university students and a community group. They found that the sex offenders, combined into a single group scored lower on intimacy and higher on loneliness measures than any of the other groups. In addition within the sex offender group, the non incestuous child molesters and the rapists scored significantly lower intimacy scores than the incestuous child molesters. It should be noted that this study was performed first on incarcerated and then on non incarcerated males and the results were essentially the same.

This study adds support to the claim that sex offenders have a deficiency in intimacy which may lead to loneliness. However, given the cross sectional nature of this and other studies which confirm these findings (e.g. Bumby & Hansen, 1997), there is no evidence to indicate whether the problems with intimacy preceded or were a consequence of the perpetration of abusive behaviour. These studies represent weak support, therefore. In addition, Ward, McCormack, and Hudson (1997) found evidence which suggested that intimacy deficits also apply to violent offenders, and hence are not specific to sex offenders. It is possible, propose the authors, that intimacy deficits represent a general vulnerability factor for the development of a variety of dysfunctional life outcomes.

Several authors of related research suggest that treatment of such individuals should involve, at least in some measure, targeting of these issues (Bumby & Hansen, 1997; Marshall, Champagne, Brown & Miller, 1997). The enhancement of social skills may be appropriate to enable certain offenders to develop more intimate relationships. However, certain types of sex offenders (with a 'preoccupied' attachment style) are in fact very practised in their social skills, particularly in eliciting emotional reassurance from their targeted victims. This illustrates the fact that insecurely attached sex offenders are not a homogenous group. Depending on their attachment style, they may face different problems and probably require different approaches to treatment (Ward, Hudson & Marshall, 1996). Thus it might be necessary to distinguish the different types of insecure attachments before embarking on a treatment programme for such individuals. There does not appear to be any published support for the effectiveness of clinical approaches based on this extension to Marshall's original theory, however.
2.2.2.3 Empathy theory

The level of empathy exhibited by perpetrators towards their victims has also been implicated in the link between victimisation and perpetration. It has been hypothesised, somewhat counter-intuitively, that the experience of sexual abuse reduces the victims' ability to empathise with fellow victims (Hanson & Slater, 1988). The former victims are therefore more likely to carry out sexually abusive behaviour as the natural inhibiting effects of empathy, possessed by non-abused individuals, are not available to them.

In the case of paternal incestuous offenders, it is thought that these fathers do not establish a bond with their victims in early childhood, prior to the abusive behaviour (Parker & Parker, 1986). This in part contributes to a lack of empathic identification with the child as a victim. Some support for this is suggested by the fact that children of step fathers, who were often absent in the early lives of their step children, are at higher risk of abuse than those of biological fathers (Williams & Finkelhor, 1990).

A weakness of this theory is that it implies all victims of abuse are consequently subject to reduced empathy. It is known that not all such victims go on to perpetrate, however it is not clear from the above description which ones are more likely to. Thus the role of empathy in reducing the likelihood of abuse needs some elucidation before testable predictions about offending behaviour could be made. In addition no mechanism is described as to how empathy is reduced in victims of abuse. It is possible that the reduction in empathy might have occurred after the perpetration of abuse had already commenced, thus facilitating recidivism rather than initiating the offending behaviour.

There is some tentative anecdotal evidence that empathy might play some part in the development of sex offending. This includes the clinical observation that perpetrators rarely express empathy for their victims (e.g. Hildebran & Pithers, 1989; Jenkins-Hall, 1989) as well as self-reports from molesters, during outpatient relapse prevention therapy sessions. These men alluded to their own lack of empathy when attempting to explain the link between their own childhood victimisation and subsequent offending behaviour (Gillies, Hashmall, Hilton & Webster, 1992).
It would, however, be possible to provide stronger evidence by means of general testable predictions on the basis of this theory. For example it could be hypothesised that all victims of sexual abuse subsequently experience less empathy than victims of other abuse, or non victims. This could be established by assessing the levels of empathy for victims experienced by samples of these populations. No evidence of such a study could be found.

Hilton (1993) made a significant additional observation that some perpetrators were able to empathise with their victims, possibly as a result of their own victimisation, but continued to abuse regardless. This could relate to a further distinction that has been made with regards to this approach, suggesting that there is a difference between ‘emotional empathy’ and ‘cognitive empathy’ (Choplan, McCain, Carbonell & Hagen, 1985). This idea arose out of the assessment of treatment strategies which have been undertaken in an attempt to increase the empathy experienced by individuals who were already perpetrators of abuse. Cognitive empathy refers to an intellectual understanding of the unpleasantness of the victim’s situation whereas emotional empathy requires the individual to be aware, through their own feelings, what emotions the victims may be feeling.

It is suggested that an increase in emotional empathy is necessary for recidivism to be reduced in sex offenders (Chaplin, Rice & Harris, 1995), however this has not been empirically tested. Indeed Hilton (1993) states that no measure exists which is sensitive enough to differentiate emotional from cognitive empathy (Choplan et al., 1985). Thus there is no easy way of establishing whether treatment programs that have attempted to reduce recidivism by increasing emotional empathy have actually achieved this. It is possible they might merely enable the offenders to act in such a way that it would seem as if this had occurred.

Hilton (1993) supported such an idea by suggesting that attempts by clinicians to enhance cognitive empathy in offenders could actually facilitate recidivism. It is possible that through such treatment, perpetrators may be more likely to pursue abusive behaviour throughout adulthood. By gaining an increased understanding of how to behave in an empathic way, they would be better equipped to deceive
therapists and others into thinking they were not at further risk of offending. This may enable them to perpetrate without incurring suspicion.

2.2.3 Behavioural and Learning Theories

Another group of theories have been put forward which suggest that some form of learning process is involved in the development of sexually abusive behaviour. These include both classical and operant conditioning as well as social learning theory.

2.2.3.1 Classical and Operant Conditioning

It has been argued that classical (Pavlovian) conditioning may explain the link between sexual victimisation and sexual perpetration (Abel & Blanchard, 1974; McGuire, Carlisle & Young, 1965). This theory argues that the childhood and adolescence of perpetrators is distinguished by a deviant first sexual experience, and a lack of success in heterosexual relationships. The combination of the early occurrence of the deviant experience and the absence of positive normal sexual experience means that the deviant experience becomes salient, and features in masturbatory fantasies. The pairing of such fantasies with sexual arousal leads to a conditioned response in which deviant fantasies predict sexual arousal, and this leads to sexually abusive behaviour.

An operant conditioning approach, when applied to the aetiology of sexual abuse, would suggest that arousal experienced during sexual victimisation in childhood reinforces the performance of sexualised behaviours. This may result in the individual engaging in sexualised behaviours under similar circumstances throughout adolescence, including in the role of aggressor, encouraging the performance of deviant sexual acts as a perpetrator into adulthood.

These two approaches can be reduced to a number of testable propositions. In their strongest form they predict that all child molesters will have experienced some form of deviant sexual experience in early life. As can be seen in the first section of the following chapter (see Section 3.2.2), the majority of studies that have addressed this issue do report high rates of sexual victimisation in the backgrounds of offenders, but
rates of 100% are almost unknown. There are currently no prospective data to indicate what proportion of victims of early deviant sexual experiences also have deviant sexual fantasies and then go on to become sex offenders.

It would constitute a weak approach to suggest that each proposed aetiology applies to a sub-sample of abusers. This is possible, of course, although for either theory of conditioning to have predictive value it would need to specify which particular victims would be susceptible to the developmental trajectory in question.

The classical conditioning theory predicts that child molesters have experienced a lack of normal sexual experiences. There is some evidence that child molesters are socially isolated, and experience emotional loneliness, but this cannot be interpreted as being anything more than suggestive. Becker and his colleagues (Becker, Cunningham-Rathner, & Kaplan, 1986) report that 95% of a sample of 22 adolescent incest offenders had experienced non-coercive sexual interaction with peers prior to their abusive behaviour. Fagan and Wexler (1988) found that 97% of violent delinquents had engaged in sexual relationships compared to 78% of sexual offenders. Despite this difference it is still clear that a substantial proportion of the sex offenders have engaged in non-deviant sexual acts.

The classical conditioning theory also predicts that child molesters will report experiencing deviant sexual fantasies in childhood or adolescence, and that these fantasies precede the first sexual act. In support of this contention, Abel and his colleagues (Abel, Becker, Mittelman, Cunningham-Rathner, Rouleau, & Murphy, 1987) stated that 58% of paraphiliacs reported experiencing deviant sexual fantasies before the age of 18 years. However, it could be argued that this sample was drawn from the extreme end of the spectrum of abusers, and may therefore not be representative of other abusive groups.

Finally, the theory predicts that child molesters should exhibit sexual arousal to sexually deviant stimuli. A number of studies have found that a proportion of child molesters are sexually aroused by images of children (e.g. Freund, 1987; Marshall & Barbaree, 1988; Marshall, Barbaree & Butt, 1988). Others have established that child molesters exhibit greater arousal to various deviant stimuli than men who have not
been sexually aggressive although it is also true that many such offenders do not
experience arousal to such stimuli (Barbaree & Marshall, 1989; 1991).

There is clearly some support for most of the predictions made by the classical
tooling model, but only for a small proportion of the offender groups which
have been examined. Thus the data do leave room for other possible aetiologies.
However further support, in the form of the evaluation of treatment based on
classical conditioning theory, is available. Marshall and Barbaree (1988) employed
the classical conditioning paradigm in their treatment program in which they
attempted to modify the sexual preferences of sexually deviant individuals. This was
done initially by means of electric aversive therapy, in which the subject was
administered electric shocks, at a level set by himself, during a laboratory
presentation of one of his deviant fantasies. This method was later changed to one in
which shocks were given during the presentation of photographs of the type of
children who represented the subject’s sexual preference, interspersed with “relief”
stimuli of naked adults who were not associated with shocks.

The third method employed involved masturbatory reconditioning, in which subjects
were required to masturbate to orgasm, as much as possible holding in the mind an
image of an adult partner. Once orgasm was reached, the subject was to continue
masturbating for 30-60 minutes (masturbatory satiation - Marshall, 1979) whilst
verbalising every deviant fantasy he could imagine. In addition the subjects carried
smelling salts between treatment sessions which they used every time they had a
deviant thought. The final part of the program involved education in appropriate
social behaviour, e.g. conversational skills, handling anxiety. Apparently very little
of this involved analysis and restructuring of the subjects’ cognitions.

The only consistently recorded within-treatment measure was that of deviant sexual
interests, assessed using a mercury-filled plethysmograph pre- and immediately post-
treatment. Two groups were compared, both comprising an assortment of
extrafamilial abusers of boys, extrafamilial abusers of girls, and incest offenders, but
differing in the fact that only one group had undergone treatment (Marshall &
Barbaree, 1988). The results indicated that all types of abusers who were treated
experienced significant reductions in the measure of deviance used (deviant
quotient). However the post treatment deviant quotient was not measured for the "untreated" group and so there is no way of knowing if this decline was due merely to a temporal effect, (i.e. it is possible that both groups would have experienced a drop in their deviant quotients with the passing of time). In addition, the treated group as a whole had significantly lower recidivism rates and fewer offences than the untreated group (p<.005).

Further support for the effectiveness of this treatment over "no treatment" was indicated by the fact that although recidivism and number of re-offences increased for both groups over the period following initial assessment, the rate of increase was significantly slower for the treated than for the untreated group (p<.025). The period since initial assessment of the group varied between 1 year and over 4 years but there were approximately equal numbers of treated and untreated subjects for each of these lengths of time.

There are two points about the untreated group that should be stated. Firstly, individuals were in this group for one of two reasons: they had been referred to the program but lived too far away from the clinic to allow regular attendance; they had been referred to the program but were incarcerated at the time and when released had changed their minds about their need for treatment. Thus the treated and untreated groups had differences other than the extent of their treatment, which might explain the variance in recidivism. Secondly the untreated group had only not been treated within the Marshall and Barbaree program. Nearly all (18/24) those "untreated" individuals who were incarcerated at the time of assessment had experienced some form of treatment in prison, although the nature of this treatment was not stated. Similarly those who were not incarcerated were subsequently referred to alternative agencies for treatment, although it is not known whether these opportunities were taken up. Thus it is not entirely clear how these results should be interpreted, as the make-up of the comparison group is far from homogeneous with respect to treatment received.

No further evidence has been found to support the operant conditioning approach, but testable hypotheses can be suggested from this theory. For example, an attempt could be made to establish an association between the experience of arousal during
victimisation and a pattern of sexualised behaviour in adolescence in a group of child sex abuse victims. Comparisons could also be made between the extent (e.g. frequency) of the sexualised behaviours performed by victims who experienced arousal and those who did not. However, the theory is not clear on how or why an individual who initially has the experience of being a victim, at some point changes roles to become the aggressor. If they experience arousal as victims, operant conditioning theory would suggest that they would want to repeat that role rather than change to the aggressor's. It would be important to describe an appropriate mechanism for this transition.

Nevertheless, several treatments for confirmed sexual offenders employ behavioural strategies which are based on the principles of operant conditioning. For example, covert conditioning is an approach in which private thoughts and feelings are manipulated by the use of an aversive stimulus to enable individuals to avoid performing paraphilic behaviours (Cautela & Kearney, 1990; McNally & Lukach, 1991). These are reported to have been successful, but tend to be individual case studies (Plaud & Gaither, 1997; Stava, Levin & Schwanz, 1993). Assessments are made on the basis of penile tumescence measurements and self-report of arousal following exposure to various stimuli (sex-related scenarios) before and after treatment. Although it is accepted that there is no ideal method of assessment, the ultimate goal must be to reduce sexually abusive behaviour in these populations. There have been no attempts to establish long-term recidivism rates following such treatments.

2.2.3.2 Social Learning Theory

There have been several attempts to apply social learning theory to the aetiology of sexually abusive behaviour (Greenberg, Bradford & Curry, 1993; Haywood, Grossman & Hardy, 1993). This is based on the principle that if certain behaviours are modeled by key individuals in a child’s life, they will be learned and later performed by the child (Bandura, 1969; 1977). In the case of childhood victims of sexual abuse, these behaviours are learned before such children possesses the emotional, cognitive or social maturity to regulate their behaviour. Thus they are at risk of subsequently displaying sexualised behaviour which may involve even younger child victims.
This theory makes intuitive sense and indeed some evidence has been found in support of it. Greenberg, Bradford and Curry (1993) compared the sexual abuse histories of a group of paedophiles, who by definition have a sexual preference for pre-pubertal children, and a group of hebephiles, who prefer pubertal children. They hypothesised that the age at victimisation of each group would be positively correlated with the age of their victims. The average age at victimisation for the two groups was 8.4 years for the paedophiles and 10.9 years for the hebephiles, a statistically significant difference (p<.001).

Although the age difference is in the right direction to support the theory, 10.9 years old seems very low for the onset of puberty in males. Thus it is questionable whether the distinction between an attraction for pre-pubertal and pubertal children is a valid one, especially as just under a quarter (41/178) of the subjects reported having victims in both groups. The authors conclude, appropriately, that the data do not support the idea that prior victimisation is the only relevant factor in the aetiology of sexual offending, nor that social learning represents the only developmental pathway. However they do suggest that social learning may play a role for some individuals.

The results from a study by Worling (1995) could be interpreted as providing additional evidence of the importance of modelling in the development of sexually abusive behaviour. He compared the backgrounds of adolescent sibling incest offenders (n=32) with those of non-sibling offenders (n=28) and found that the incest group reported being sexually abused in childhood significantly more than the non-sibling group. In addition, they were exposed to more marital discord, parental rejection, parental physical punishment and a more negative, argumentative family atmosphere.

It is suggested, consistent with social learning theory that the adolescent sibling group, through their abusive behaviour, were acting out the sorts of relationships modelled for them within their families (Davis & Leitenberg, 1987). However there are alternative interpretations. For example, it could be argued that the incestuous behaviour represents an attempt to find mutual comfort by both children in a dysfunctional family.
Further support for social learning theory was reported by Prentky et al. (1989), who found that the level of sexually aggressive behaviour shown by an offender was related to the sexual abuse and adult sexual deviation experienced within his family. The authors suggested that exposure to such factors in the family coupled with a lack of stability, normally provided by secure familial relationships, provides a model for these individuals which they use to express their violent impulses in sexually deviant behaviour. This in turn suggests that the quality of early interpersonal relationships, particularly with the primary carer, and the experience of sexual abuse as a child may be important in understanding and explaining extreme sexual violence.

A final suggestion as to a possible social learning-based mechanism for the development of sexually abusive behaviour was offered by Laws and Marshall (1990). They argued that the concept of self-labeling might be useful in explaining the continuity and discontinuity between sexual victimisation and perpetration. This concept suggests that individuals make attributions about themselves on the basis of their experiences and behaviour. If they are made to believe in childhood that they are responsible for their own victimisation, they may come to label themselves as sexually deviant, and this label may translate into abusive behaviour. Alternatively, if they are told that the behaviour is the responsibility of the perpetrator, this label may not be applied. This approach appears to be closely related to theories involving cognitive distortions which will be looked at in more detail in the next section.

There are many treatment programs based, at least in part, on social learning principles (Epps, 1994; Mamabolo, 1996; Sermabeikian & Martinez, 1994). Strategies for treating short term effects, such as anxiety, are not necessarily based in social learning theory. However a large focus of such programs would be aimed at treating socially learned responses. This would typically involve altering the child's attributions of responsibility, attempting to explain the perpetrator's behaviour, restoring in the child expectations of self-efficacy, and teaching age-appropriate norms of sexual behaviour (Wheeler & Berliner, 1988).

Although detailed descriptions of such programs are often reported in the literature, presumably to aid other clinicians in their treatment of victims and offenders, their
effectiveness is rarely assessed in any empirical way, if at all. In the course of this review, no papers were found that related to assessments of purely social learning based treatment strategies.

2.2.4 Cognitive Distortions

The fourth set of possible mechanisms to account for the link between sexual victimisation and perpetration have arisen out of the theory that cognitive distortions account for a variety of deviant sexual behaviours (Hall & Hirschman, 1992). These distortions allow those who go on to be perpetrators to excuse their own abusive behaviour by means of normalisation, or other forms of rationalisation. For example, the adult perpetrator may only recall the pleasurable aspects of his own childhood victimisation, having repressed the traumatic elements (Ryan, 1989). Thus, an abusive event is represented in the mind as something normal and enjoyable whilst in reality it may have been extremely upsetting and damaging. It is considerably easier to justify giving a child a pleasurable experience than an abusive and harmful one. This leads to a plausible prediction, that victimised men who normalise their own experiences of sexual abuse may be more likely to perpetuate abuse than those victims who do not.

Some support for this was found by Briggs and Hawkins (1996) who compared the responses to their own abuse of a group of incarcerated sex-offenders with a group of non-offenders living in the community. They found that 88% of the offenders regarded their victimisation as normal, whilst only 68% of the non-offenders regarded it as such (p<.05). Similarly, many more of the offenders than non-offenders found their own victimisation an enjoyable experience (69% vs. 17%, p<.001).

A large part of this difference could be accounted for by a sampling bias, as both groups were self selecting, and the results also relied on the honesty of a notoriously unreliable group (i.e. sex offenders) in reporting their own victimisation. In addition, as the authors pointed out, it is also likely that the non-offenders were more aware of their own negative reaction to the abuse as many of them had subsequently
undergone counselling. This, rather than offender’s normalisation of the experience, might explain why they considered the experience less enjoyable than the sex offenders. Finally there was also a large group of non-offenders who had normalised their victimisation, according to the measure of normalisation employed in this study. It seems, therefore that there are other factors which affect whether a victim of sexual abuse who normalises this event becomes a perpetrator.

General support for the relevance of cognitive distortions within this population is suggested by the results of studies by Gore (1988) and Stermac and Segal (1989). Gore found that a group of child molesters were significantly more likely than other sex offenders and normal controls to believe that children wanted to have sex with adults, that such behaviour was socially acceptable, and that children were unharmed by it. Stermac and Segal found that a group of child molesters also thought that more benefits accrued from such abuse than did similar comparison groups. In addition Hayashino, Wurtele and Klebe (1995) reported that extrafamilial offenders had more cognitive distortions than both non-sex offenders and normal control groups. Unfortunately they also had significantly more distortions than incestuous child abusers. The authors explained this finding by the fact that extrafamilial offenders had significantly more victims than incest perpetrators and hence had a greater need to justify their behaviour.

However, in the Hayashino et al. (1995) study, the extent of cognitive distortions was measured using the Cognition Scale (Abel, Becker & Cunningham-Rathner, 1984) whose scales can be affected by response-bias (Haywood, Grossman, Kravitz & Wasiliw, 1994). In addition, the retrospective nature of the study means there is a lack of a clear mechanism for the progression from victimisation to perpetration. Support has been found for the existence of cognitive distortions in the minds of former victims who are already established as child abusers over and above other groups. However there is no evidence that this is the case for victims of abuse, prior to them actually perpetrating. The correct temporal order has not been established and hence it is not clear whether the distortions have a causal role in, or are merely a consequence of, abusive behaviour.
A longitudinal design would represent a more rigorous test of this theory. This would involve testing a group of victims for the extent to which they normalised their abusive experience at time one, and then at time two, establishing which have become perpetrators. However, a real-time design such as this again has too many ethical pitfalls to be a realistic possibility. A longitudinal catch-up design would be an alternative, involving the coding of data recorded at the time of the subjects’ victimisation in childhood and then following them up as adults. However, such an approach is also unlikely as the extent to which the victims normalised their abuse around the time it was perpetrated would probably not have been established systematically.

A more appropriate design that would provide some support might be to test the effectiveness of a treatment strategy specifically designed to reduce the normalisation that can occur in victims, and thereby limit the number who go on to perpetrate. This could be applied in conjunction with standard treatment to a randomly selected group of victims and their outcomes compared after a number of years with victims who only received standard treatment.

To our knowledge, there is no literature about treatment programs applied to victims, whether or not they have gone on to offend, which specifically challenge the cognitive distortions held by these individuals, and which do not include strategies derived from other approaches such as classical conditioning or social learning theory (e.g. Marques, Nelson, West & Day, 1994). For example, treatments based on the principle of the ‘abuse cycle’ described in the next section certainly involve challenging cognitive distortions in offenders (Ryan, Lane, Davis & Isaac, 1987). However such programs also attempt to reduce the effect of behavioural reinforcement. This makes it very difficult to evaluate the effectiveness of one particular treatment approach.

Even if a treatment strategy, comprising only of the reduction of cognitive distortions, were found to be more effective than standard techniques in reducing recidivism in sex offenders, this would not provide direct evidence that normalisation was involved in the original aetiology of the offending behaviour. However, such a
finding might represent a first step in indicating the importance of this cognitive distortion in the perpetration of such acts.

2.2.5 Synthesis of theories

There have also been attempts to describe the development of sex-offending which have involved the synthesis of more than one of the above theories. Those described below include the ‘four preconditions’ model of Finkelhor (1984), as well as Prentky et al.’s (1989) theory of ‘caregiver inconstancy’ and Ryan’s (1989) ‘cycle of abuse’ theory.

2.2.5.1 Four preconditions model

Finkelhor’s ‘four preconditions’ model (Finkelhor, 1984) is widely known to practitioners working in the field of child sexual abuse. Finkelhor brought together both individual and societal factors in an attempt to explain how an individual might be able to perpetrate such sexually deviant behaviour. He proposed that for sexual abuse to occur, factors relating to four preconditions must be in place. The preconditions are: a motivation to sexually abuse; the overcoming of internal inhibitions; the overcoming of external inhibitions; the overcoming of the child’s inhibitions.

It should be stated that this model is not solely an explanation for the progression from victimisation to perpetration. Finkelhor correctly recognised that abusive behaviour of this kind can come about through a number of different mechanisms. However prior victimisation is explicitly included within the four preconditions model as being one factor that relates to the motivation to sexually abuse.

Finkelhor suggested that one possible motivation to sexually abuse could arise as a result of traumatic conditioning that can occur if an individual is sexually abused in childhood. The trauma of the abuse can result in the premature sexualisation of the victim. This could occur via a complex mechanism involving negative conditioning, identification with the aggressor, flashbacks and sexual preoccupations, and could result in an inclination to sexualise other children (Bentovim, 1992).
Hand in hand with this sexualisation process come other factors that may have some bearing on the former victim’s development towards sexually offending. The sense of ‘powerlessness’, ‘betrayal’ and ‘stigmatisation’ he experienced as a result of his childhood victimisation may stimulate an aggressive, dominating response when older. In an attempt to off-load the label of ‘powerless victim’ that he has given himself, he may seek out another individual who appears to represent these same qualities, on whom he can inflict the same humiliations he suffered. Of course, this method is unsuccessful in ultimately relieving the perpetrator of his negative self-perception but at the same time may provide him with some sexual gratification. Thus the behaviour is repeated.

This explanation for the development of sexually abusive behaviour in former victims represents a credible hypothesis. However there are several strands to this approach involving traumatic sexualisation, a sense of powerlessness, identification with one’s abuser, betrayal and stigmatisation, and as yet it is not entirely clear how they interact to produce an abusive outcome. For example, are all of these processes necessary or simply one? Each appears to provide a sensible explanation but before the validity of this approach can be tested, each of the processes would need to be more clearly described including why some individuals might progress along a certain pathway whilst another would not, and how the processes relate to each other.

No treatment programs for victims of abuse, or offenders, have been identified that were explicitly and solely based on Finkelhor’s four preconditions model. Hence no evidence has been found for the validity of this model from treatment evaluation studies.

2.2.5.2 Caregiver inconstancy
A second approach involving more than one theory was suggested by Prentky et al. (1989). This involved a synthesis of social learning and attachment theories. The authors hypothesised that exposure to family deviance in conjunction with an experience of discontinuity of care would provide a model for former abuse victims to express their violent impulses in sexually deviant behaviour.
Having found that caregiver inconstancy was an independent predictor of sexual aggression, Prentky et al. (1989) hypothesised that being moved from one temporary caregiver to another, without the opportunity to form a stable attachment would result in reduced self-esteem, increased distrust and hence hostility towards others. This in turn would increase the likelihood of aggression within intimate relationships, possibly to be played out in a sexual manner.

Although no clear evidence of this mechanism has been identified, it may be possible to establish associations between certain of these factors to provide some support. For example, if it were found that having controlled for other possible causal factors ‘caregiver inconstancy’ correlated with ‘low self-esteem’ in a random sample of children, this would at least be consistent with the proposed model.

However, certain aspects of the mechanism are not fully explained. For example, it is not clear how reduced self-esteem necessarily leads to increased distrust, why distrust should result in proactive aggression and under what circumstances would that aggression be sexual, not just physical. Validation of the theory would be facilitated if issues such as these were clarified.

2.2.5.3 Cycle of abuse

Another model involving the synthesis of various theories was proposed by Ryan (1989) who hypothesised that the progression from victimisation to perpetration involved a series of events, linked together by the victim’s particular responses to those events. Thus, a male subject, victimised or otherwise exposed to sexual deviancy may, via a process of social learning, add these behaviours to his list of possible sexual activities. In addition, his experience of abuse and perhaps loss could result in feelings of powerlessness and confusion resulting in a poor self-image. As an adolescent, he may attempt to overcome or gain power over these feelings by victimising others which, given his previous experiences may involve sexually abusing them. This, Ryan suggests, might be an attempt to protect himself against the implications of his own victimisation, or as a result of over-identifying with the abuser. Furthermore, the reinforcing nature of sexual abuse may result in the perpetrator repeating this abusive behaviour, employing rationalisations and other cognitive distortions to provide additional support to the behavioural reinforcement.
From such a developmental approach, Ryan developed the concept of a 'cycle of abuse'. This is an attempt to describe the circular nature of the cognitive, emotional and behavioural processes thought to occur in the aetiology of offending behaviour.

Given that the scenario described above involves nearly all the theories outlined in this review, there is little value to be gained from repeating the analysis of evidence required to test the theory. Not only do all the problems of prediction and testability apply, there would also be a need to establish the temporal order of these events. Perhaps the best evidence for such an approach could be provided by support for predictions made from each of the stages of the cycle, and these have already been described in the relevant sections above.

Additional support could be given by the assessment of treatments established on the basis of this theory. Ryan's theory of the cycle of abuse is often used in sex offender treatment centres, with offenders being required to identify the different stages of their cycles (Johnson, Richardson & Brunett, 1995; Ryan & Lane, 1997; Wolfe, McMahon & Peters, 1997). These represent the particular circumstances, feelings, cognitive distortions and behaviours that are believed to have resulted in the development of their abusive orientation (Epps, 1991).

Since the abuse cycle theory is based on the principle that the offending behaviour has many such causes, treatments derived from it also comprise many approaches. This includes helping individuals to understand why they keep thinking, feeling and behaving in the same maladaptive ways, and teaching alternative strategies to employ when they recognise they are falling into these familiar patterns (Epps, 1991).

Although these treatment programs are often considered to be employing a shotgun approach of different strategies, each is addressing a specific element in the abuse cycle (Ryan & Lane, 1997). As such, it should be possible to assess the effectiveness of such treatments. This still applies even though each subject may have experienced a slightly different program by the time it ends, because being flexible to the needs of the individual is an important principle of this approach.
There have been very few attempts to evaluate treatments that derive from the cycle of abuse theory. If an assessment is made, it usually involves measuring the extent of any change in the subjects' attitudes, beliefs and behaviours both during and following the course of the treatment. This may also include a follow-up assessment up to a year later, although seldom much longer than this. One such study was performed by Wolfe, McMahon and Peters (1997) in which hierarchical linear modelling was employed to measure growth in relationship skills, awareness and knowledge within the treatment group. This involved gathering waves of data on individuals over time to enable a longitudinal growth model to be established (Willet, Ayoub & Robinson, 1991). Over the course of the treatment, they found significant improvement in the "support given to others", and a significant decline in "negative attitudes and beliefs" held by the treatment group. They also found a trend in which the treatment group were using fewer coercive tactics with their dating partners than a group of controls, although this fell short of significance (p<.2).

Such data are encouraging to leaders of such treatment programs, and indicate that the approach employed is at least having an effect in the right direction. However they fall short of establishing whether permanent cognitive and behavioural change has taken place if the subjects are not followed up regularly to determine offending behaviour. There is typically no on-going analysis of sexual offending following treatment.

However one study has been found which did involve a long-term follow up of a group of 193 juvenile sex offenders (Bremer, 1992). They questioned the former residents of a treatment program up to 8.5 years after leaving and found only a 6% recidivism rate (based on sexual offence convictions) whilst 18 (11%) self-reported subsequent offending behaviour. Although an assessment of a resident's offence cycle was included as a part of the treatment program, several other treatment strategies were also employed (e.g. victim empathy) and so it is difficult to know which one or more to ascribe the success to. It may be that as a whole the program did have a positive effect, but owing to the absence of a comparison group even this is not clear. It should be stated, though, that none of the subjects who had spent over 15 months in this treatment had either self reported or been convicted for sexual offending behaviour.
2.3 Summary

There are clearly several theories that have attempted to account for the development of sexually abusive behaviour in individuals who have experienced such abuse as children. There are many ways in which such a theory can be assessed, but if it is not possible to make a testable hypothesis from it, it is difficult to see what might be added to scientific understanding.

The majority of the theories outlined above do allow testable hypotheses to be made, and indeed some evidence has been found for at least a partial mechanism to describe the link between victimisation and perpetration. However, there has been no direct evidence that any of the theories provide a valid explanation for this link. Given the appropriate ethical restrictions placed upon research of this nature, it is unlikely that there will ever be direct proof of any one theory. The best that can be attempted is to provide evidence for aspects of a theory, which together may amount to some support. Alternative evidence, although weaker, could be provided by a more consistent and long-term evaluation of individual theory based treatment strategies. It is recognised that more such studies are needed to establish which model is most effective under what circumstance (Hilton & Mezey, 1996).

It is widely accepted that there is more than one route between sexual victimisation in childhood and subsequent sexually offending behaviour. Several of the theories outlined above may in fact describe valid pathways for such a link. However many are based on concepts that, if not diametrically opposed to each other, are so divergent as to render them apparently irreconcilable.

In order for research to progress beyond this situation, a theoretical framework is needed within which such validated theories can meaningfully co-exist. Such a framework would provide both an appropriate context for these theories and the necessary guidance for further investigations into their validity, including the most apt methodology that these studies should follow. It seems that the particular approach of developmental psychopathology would fulfil just such a role.
2.4 A Developmental Psychopathology Perspective

From the summary above, it appears that the aetiology of sexually abusive behaviour may most accurately be represented as a collection of different developmental pathways, which broadly adhere to one of the mechanisms described by the theories. Each pathway involves the interaction of a variety of external events with certain individual characteristics according to the particular theory that describes it. Although the events and the characteristics of any two individuals will be different, they may follow a similar pathway in the development of their abusive behaviour.

A conceptualisation of development such as this is inherent in the particular approach of developmental psychopathology (DPP). The purpose of this final part of this chapter is to briefly describe what is meant by developmental psychopathology and how this approach can be usefully applied to the subject of the development of sexual offending.

Developmental psychopathology is a field of study that exists within the broader discipline of developmental psychology. It was succinctly defined in the seminal paper by Sroufe and Rutter (1984) as “the study of the origins and course of individual patterns of behavioural maladaptation” (p.18). A more detailed description of the scope of this area is necessary however, to demonstrate how it can be applied to the subject of this thesis.

There are five key areas of interest to developmental psychopathologists that guide any research they attempt. These include the importance of making an assessment over time, the identification of both risk and protective factors which significantly contribute to outcome, the careful analysis of groups who do not fit the hypothesised pattern, and the consideration of the interaction between risk and developmental stage.

In order to understand the development of a particular behavioural disorder, it is necessary to consider how that disorder may have manifested itself over the course of time. This means attention must be paid to factors occurring prior to, and following
onset, as well as how the condition relates to other disordered and non-disordered behaviours.

A central tenet of the developmental approach is that certain factors identifiable before the onset of the disorder will represent an increased risk that it will develop. These may constitute external events, such as a prolonged period of maltreatment or an acrimonious parental divorce. They may also consist of behaviours that are manifested by the individual, for example anti-social behaviour in childhood has been shown to predict anti-social personality disorder in adulthood (Robins, 1966).

However, it may not be so obvious how other behaviours, which occur early in life, could be linked to a later psychopathological outcome. An example of this is given by Sroufe and Rutter (1984), in which a maltreated boy successfully learns to keep himself safe from his emotionally abusive parent by blunting his emotional experiences. This particular adaptation may be appropriate in the unfortunate circumstances he finds himself, bearing in mind his age and developmental stage. Without this ability, he is at greater risk of developing some form of psychopathology. However, if such a pattern is maintained into adulthood it may become maladaptive, (e.g. the individual may find the important process of forming intimate adult relationships particularly difficult). The pattern of adaptation that the individual adopts in responding to stressful stimuli is thought to be a consistent factor throughout various developmental stages. It is this fact that allows predictions to be made from early behaviours (Rutter, 1981).

To establish the bounds of the development of a particular behaviour or disorder and to help identify possible mechanisms for its development, key comparisons could be made between some individuals who go on to develop the outcome under examination and others who subsequently function normally. Factors that are associated with the outcome but not with normal functioning, and that predate the outcome’s onset are known as ‘risk factors’ for that outcome. These could be established by comparing the pre-onset exposure of both groups to a range of factors. For example, in the case of the development of sexually abusive behaviour, the two groups’ own experiences of maltreatment of various kinds (e.g. physical abuse, neglect) prior to the manifestation of this behaviour could be compared. One might
expect that certain of these experiences would be more prevalent in subjects who
went on to develop the behaviour than in those who did not. These might represent
risk factors for this behaviour.

The identification of 'protective factors' would also be possible if certain factors
were found that reduced the likelihood of the adverse outcome only in individuals
who had also experienced some risk factors. It is important to note that this effect
should not exist for individuals who were not exposed to risk; a significant
interaction between risk and protection must be established (see Section 4.2.2.1).

Expanding the above example, there are likely to be a number of individuals who
were exposed to a high number of risk factors but who did not develop into sexual
abusers. A possible explanation might be that they also experienced certain
protective factors (e.g. at least one supportive parent), which mitigated the negative
effects of the risk factors. However, for there to be an interaction effect, having at
least one supportive parent should not make someone who has not been exposed to
the risk factors significantly less likely to become an abuser.

Consideration would also be paid to two further groups: individuals who experienced
these risk factors but who developed different disorders, and individuals who did not
experience these risks but did develop the disorder under examination. Analysis of
the latter group would allow other possible mechanisms to be identified which result
in the outcome in question, whilst both groups would help in the identification of
mediators and moderators in the development of the disorder.

A further matter of importance to the developmental psychopathologist is the nature
of the interaction between the experience of risk and the developmental stage
reached by the individual. It is possible that a risk factor will have two different
effects if experienced at different points in a person’s development. Thus it would be
necessary to establish what constitutes ‘normal’ functioning at particular stages, and
what factors are important at these points for normal development to occur. It would
also be important for comparison to establish the relative functioning of individuals
who ultimately develop the disorder at each stage.
"...the nature of the developmental process itself, characterised by progressive adaptation and transformation, provides a unique orientation for conducting research on the origins and course of late-appearing psychopathology. This perspective alerts researchers to broaden the search for antecedents of pathology away from phenotypically similar patterns of behaviour in early life and toward particular adaptational failures that are defined in terms of salient issues of the given age period."

(Sroufe & Rutter, 1984, p.24)

Such an analysis would permit the developmental pathways of disordered and non-disordered persons to be established both in terms of their relative functioning over an extended period of time and their different experiences of significant risk and protective factors.

The key contribution that this approach offers is a comprehensive framework to guide the direction that research might take in finding a link between early experiences and subsequent psychopathology. None of the theories for the development of sexually abusive behaviour in former victims of abuse that are described above take into account all of the five tenets of the developmental psychopathologist. Yet all of those tenets involve important tests of theory. For example, although the theory of fixation does involve a consideration of the developmental stage of the sexual offender, this is by no means complete. It is not clear which particular developmental stage renders a child most susceptible to fixation, should the child be sexually victimised during this stage. In addition, no attempt has been made to suggest additional risk or protective factors that make it more likely for a sexually victimised child to become fixated in his sexual preference. Thus a more rigorous test of the validity of each of the theories could be made according to the guidelines of the developmental psychopathology approach.

Given the current, rather fragmented and non-structured state of the literature that addresses the continuity between sexual victimisation and offending, there is also a strong case for adopting the developmental psychopathology approach, largely unencumbered by pre-existing theories. This would involve establishing which factors in addition to sexual victimisation play a risk or protective role in this continuity, and which developmental stages place victims of abuse at the greatest risk.
of becoming offenders. It would also involve a detailed investigation of groups of sexual offenders who have not previously experienced sexual victimisation or other key risk factors, and all of this work should be done over an extended period of time.

Given the number of theories that have been suggested as mechanisms for the development of perpetrating behaviour, one might wonder if another approach will just confuse the issue further. However, as outlined above, the evidence for the validity of these theories is sparse and more importantly there does not appear to be any obvious alternative method to pursue in order to take any one theory forward. Rather than focusing further on any particular theory or group of theories, therefore, it would seem to be appropriate to adopt a framework to guide research in its next steps. The approach of developmental psychopathology appears particularly suitable.

Such a framework has been used by Cicchetti and Lynch (1993) to develop an ecological transactional model based on developmental psychopathological principles to describe the development of maltreating behaviour. This involves the hypothesis that an individual will develop maltreating behaviour if they are exposed to enough risk factors, so that they outweigh the effects of any co-occurring protective, compensatory or buffering factors (Cicchetti & Carlson, 1989). This allows the possibility that several developmental pathways can lead to this behaviour, since the interplay between risk and protection may have been entirely different in the course of the development of any two maltreating individuals.

A DPP approach was also adopted in a study by Skuse et al. (1998) who attempted to identify risk factors for the development of sexually abusive behaviour in sexually victimised males. Using a cross-sectional design, a group of victimised adolescents who had gone on to sexually offend were compared with a similar group of abuse victims who had not subsequently offended. The investigators found that the experience of a number of factors discriminated the two groups. Unadjusted odds ratios indicated that 'experiencing intrafamilial abuse' (OR = 18.0; 95% CI = 1.8 to 184.7), 'witnessing intrafamilial abuse' (OR = 8.1; 95% CI = 1.2 to 53.2) and 'discontinuity of care' (OR = 7.2; 95% CI = 1.1 to 48.6) were discriminators.
This study was hypothesis generating and the findings require validation with a different and much larger sample, preferably using a longitudinal design. However, the results suggest that these factors may play a role in the development of sexually abusive behaviour in former victims of abuse. Further research may provide evidence of protective factors and even a possible mechanism. This is vital if such information is to be of use in halting the intergenerational transmission of this behaviour.

**Summary**

There are a number of disparate theories that have been proposed to account for the continuity between sexual victimisation and sexual offending. Little evidence exists for the validity of any one of them, and the available evidence does not indicate an obvious next step to take in furthering our understanding of this development. However, the approach of developmental psychopathology may provide an appropriate and thorough framework to guide future research.

The first step in this process will be to establish which factors are important in the development of abusive behaviour. A developmental psychopathological approach involves an equal interest in risk and protection. In the next two chapters, therefore, the evidence for both risk factors for (Chapter 3), and for protective factors (Chapter 4) against the development of sexually abusive behaviour will be reviewed.
3.1 Introduction

In the previous chapter, a number of theories for the development of sexually abusive behaviour were identified. The majority of these involved a progression from childhood sexual victimisation to adult sexual perpetration, and attention was particularly focused on theories of this nature. It was clear from the analysis of this literature that little evidence has been found to date for the validity of any of these theories and no one theory appeared to show more promise than the others.

As a result, it was proposed that at this stage, the most productive next step in furthering our understanding of the aetiology of sexually abusive behaviour might be to adopt a developmental psychopathological approach. This would involve the identification of two categories of factors:

- those factors that increase the likelihood that an individual who had been exposed to them would subsequently perpetrate sexually abusive behaviour (risk factors); and
- those factors that might mitigate the negative effects of the risks (protective factors).

The focus of this thesis is the identification of protective factors which make the development of sexually abusive behaviour less likely for those who are at risk. However, as has been stated in the previous chapter (see Section 2.4), protective factors cannot be identified in the absence of risk (see also Section 4.2.2 for a more detailed explanation). It is appropriate, therefore, to describe and critically evaluate the key findings from the risk
literature first, which is the purpose of the current chapter. Protective factors will be addressed in the following chapter.

A considerable number of studies have been conducted that have attempted to identify risk factors for the development of sexually abusive behaviour. As the identification of risk factors does not comprise the main subject of this thesis, their findings will be described relatively briefly. Before doing so, however, it is necessary to give a full and clear definition of the term ‘risk factor’ and to describe what is required for this status to be ascribed to a variable. Kraemer, Kazdin, Offord, Kessler, Jensen and Kupfer (1997) define a risk factor as follows:

"... a measurable characterization of each subject in a specified population that precedes the outcome of interest and which can be used to divide the population into 2 groups (the high-risk and the low-risk groups that comprise the total population)." (p. 338)

The probability of the outcome must be demonstrably greater for the high risk group than for the low risk group. In addition, there must be a statistically significant association between the risk factor and the outcome to demonstrate that they are not independent. However, because it is rare for any two variables to have no association, it is important to indicate what is referred to as the potency of the risk factor, i.e. some statistical measure of the ability of the risk factor to discriminate between the high and low risk groups (e.g. an odds ratio).

The specification that the occurrence of the risk factor must precede the onset of the outcome is particularly important when considering the methodology to be employed in studies that attempt to identify risk factors. If a potential risk factor is measured at the same time as, or after the measurement of the outcome variable, and an association is found between the two, there may be no way of telling whether this factor is a cause or a consequence of the outcome. All that could be claimed is that the factor is a correlate of
the outcome. Thus the most effective research design for establishing risk factors is a longitudinal design; the temporal order of events can rarely be used established using cross sectional, retrospective designs. Therefore, despite being commonly used for this purpose, these are not ideal for identifying risk factors.

A range of variables have been investigated as risk factors for sexually abusive behaviour. These include the experience of physical abuse (Borowsky, Hogan & Ireland, 1997), witnessing family violence (Skuse et al., 1998) and neglect (Widom & Ames, 1994). More significantly, the large number of theories about the development of sexually abusive behaviour that involve prior childhood sexual victimisation suggest that it may represent the most likely risk factor for this behaviour. The evidence for this will be described immediately below, followed by a summary of the evidence for the other potential risk factors for sexual abuse perpetration.

3.2 Childhood sexual victimisation as a risk factor for sexually abusive behaviour

A large number of research studies have attempted to establish whether a childhood experience of sexual abuse is a risk factor for subsequent abusive behaviour. Before their results are described and any conclusions drawn, however, some of the methodological weaknesses that can be found in this literature will be highlighted. There are three main issues to be outlined. These relate to the inappropriateness of the research designs employed, inconsistencies with sample selection and the reliability of self-report measures.

3.2.1 Methodological issues

The vast majority of studies that have attempted to provide evidence that childhood sexual victimisation is a risk factor for sexually perpetrating behaviour have employed retrospective designs (e.g. Craissati & McClurg, 1996; James & Neil, 1996). That is, they involved finding out from a group of individuals, identified in adolescence or adulthood
as sex offenders, the proportion who had been sexually victimised in childhood. The problems with this approach when attempting to identify risk factors have been described above (see Section 3.1).

There have also been problems with the sampling in studies that have investigated the role of childhood sexual victimisation in the development of sexually abusive behaviour. There seems to have been little consistency in the types of offenders and comparison groups employed in these studies. The samples were often drawn from populations of either child sex offenders (e.g. Freund & Kuban, 1994), rapists (e.g. Haapasalo & Kankkonen, 1997), or some mixture of the two (e.g. Awad & Saunders, 1991). Some of them investigated several different groups of offenders and non-offenders (e.g. Craissati & McClurg, 1996), whilst many merely asked one group of sex offenders, failing to draw any comparisons with a non-sex-offending group (Epps, 1991; Richardson, Graham, Bhaté & Kelly, 1995). Others still mixed males and females to form a single study group (James & Neil, 1996).

It is therefore difficult to establish a consistent answer as to whether childhood sexual victimisation is a risk factor for sexually abusive behaviour, since this outcome is defined so inconsistently. In addition, the use of mixed samples (e.g. both genders, different types of sex offenders) makes a valid interpretation even more difficult, as sexual victimisation may represent a risk factor for males but not for females, or for child abusers but not rapists.

A further problem lies in the fact that the subjects in these studies, as perpetrators of sexual abuse, would have a vested interest in stating that they were once victims of abuse. There is quite simply a possibility that they might not be telling the truth, either consciously or not, in order to provide a convenient explanation for why they themselves have perpetrated abuse. Whatever the reason is, the result would be an inaccurate estimate of the proportion of abusers who were abused. The association of childhood victimisation to subsequent offending might therefore be exaggerated.
Indeed, there is some evidence that this over-reporting of abuse has occurred (Hindman, 1988). In her clinic for adult child molesters in Oregon, USA, Hindman would ask the men for a detailed sexual history as an initial part of their treatment. This included questions about whether they had been child victims of sexual abuse themselves. In the first two years this was done, the proportion of sex offenders who reported previous sexual victimisation was found to be 67% (N = 40). From this point onwards, all new sex offenders at the clinic were informed that they would also have to undergo a polygraph test to establish the veracity of their claims. If they failed the test, they were told they would go back to prison. Over the following six years the proportion claiming sexual victimisation suddenly dropped to 29%.

The post polygraph group represented an entirely different sample of offenders to the previous years, and it is possible that the drop could be explained by this fact. However, such an explanation would represent a remarkable coincidence. The results do, at the very least, suggest that the reported proportions of abused sex offenders obtained from cross sectional studies might be over-estimates.

3.2.2 Prevalence of child sexual abuse amongst adult sexual offenders

Bearing these three issues in mind, the following section represents the findings from a range of studies looking at the proportions of sex offenders who had been sexually victimised themselves in childhood. It is perhaps appropriate to briefly outline the results of those studies with more methodological problems first, to identify their short-comings, and then progress towards those with more robust designs and hence more meaningful results.

3.2.2.1 Studies with methodological problems

Those studies from which the fewest conclusions can be drawn were conducted with groups containing different types of sex offenders (e.g. male incest, male child molesters, unspecified mixture of ‘sex offenders’) and did not involve any comparison groups.
Studies such as these, conducted in the United States, reported proportions of offenders abused in childhood ranging in males from 8% (Adler & Schutz, 1995) to 75% (Romano & De Luca, 1997), and in females from 38.5% (Allen & Lee, 1992) to 100% (Hunter et al, 1993).

Research conducted in the UK has reported abused proportions consistent with these figures. Browne, Foreman and Middleton (1998) studied a sample of 96 male child sex offenders who were attending a community based Sex Offender Treatment Unit. They reported that 43% of the sample had either been sexually or physically abused as a child, although the sexually abused proportion on its own was not stated. Waterhouse, Dobash and Carnie (1994) gathered data on 501 cases of child sexual abuse, which represented all such cases held at the start of the study by a range of agencies in Scotland. The agencies included social work departments, prisons, police services and hospitals. From files held by these agencies, it was possible to establish the childhood sexual abuse history of 209 of the perpetrators in these cases. It was found that 17% had experienced sexual abuse as children, either on its own (12%) or in conjunction with physical abuse (5%). However the authors rightly advise caution when interpreting these results as data were available for so few (42%) of the original total sample.

Finally, in an interview study of 91 convicted child sex offenders (Elliott, Browne & Kilcoyne, 1995), 68% of the participants stated that they had been sexually abused as children, although this included non-contact abuse. Contact sexual abuse was reported by 59% of the sample.

Child sex offenders therefore appear to represent a group with, on the whole, high proportions of childhood sexual victimisation. However, without any comparison groups, the strength of any association between offence status and prior victimisation cannot be gauged.
There are a number of studies that did report both the proportions of sex offenders who were victims of abuse and comparison proportions for other groups (e.g. non-sex offenders or non offenders). Four out of the six studies that compared the proportions of adult male child molesters with those of non-sex offenders found that rates of childhood abuse were significantly higher for the sex offenders than for the comparison groups (see Table 3.1). Similarly, two out of three studies which compared the proportions of adolescent sex offenders with adolescent non-sex offenders found a significant difference between them (see Table 3.2). These studies therefore provide reasonable support for an association between victimisation and subsequent perpetration.

The use of at least one comparison group in these studies makes it possible to assess the meaning of the quoted proportions, and to evaluate the strength of the association between sexual victimisation in childhood and subsequent perpetration. Although many studies reported a significance value for the difference in proportions between the groups, very few calculated the strength of the association with an appropriate statistic (e.g. odds ratio).

In addition to the problems highlighted earlier, there are three further methodological weaknesses in the research described above. First, all of these studies involved the retrospective self-report of subjects' sexual victimisation and it was not clear whether the authors had established that the victimisation experience always preceded the onset of their perpetrating behaviour. Second, very few of the studies made a serious attempt to
Table 3.1 Self-reported sexual victimisation in childhood among adult male sex offenders and non-sex offending groups

<table>
<thead>
<tr>
<th>Authors</th>
<th>Proportion of Perpetrator sample(s) abused</th>
<th>Proportion of Comparison group(s) abused</th>
<th>Reported significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Property offenders [n=20] 5%</td>
<td></td>
</tr>
<tr>
<td>Haywood et al. (1996)</td>
<td>Child molesters: Clerics [n=24] 21%</td>
<td>Non offenders: Clerics [n=48] 4%</td>
<td>OR = 6.05 (CI=1.08-33.96)</td>
</tr>
<tr>
<td></td>
<td>Non-clerics [n=45] 49%</td>
<td>Non-clerics [n=40] 15%</td>
<td>OR = 5.42 (CI=1.90-15.43)</td>
</tr>
<tr>
<td>Lang &amp; Langevin (1991)</td>
<td>Heterosexual paedophiles [n=66] 45%</td>
<td>Non offenders (volunteers) [n=50] 0%</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>Homosexual paedophiles [n=29] 55%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incest offenders [n=36] 50%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.2 Self-reported sexual victimisation in childhood among adolescent male sex offenders and non-sex offending groups

<table>
<thead>
<tr>
<th>Authors</th>
<th>Proportion of Perpetrator sample(s) abused</th>
<th>Proportion of Comparison group(s) abused</th>
<th>Reported significance of difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awad &amp; Saunders (1991)</td>
<td>Child molesters [n=45]: 21%</td>
<td>Delinquents [n=24] 0%</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Sexual assailers [n=49]: 4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ford &amp; Linney (1995)</td>
<td>Child molesters [n=21]: 52.2%</td>
<td>Violent offenders [n=26] 17.4%</td>
<td>p&lt;.01</td>
</tr>
<tr>
<td></td>
<td>Rapists [n=14]: 17.4%</td>
<td>Status offenders [n=21] 13.0%</td>
<td></td>
</tr>
<tr>
<td>Benoit &amp; Kennedy (1992)</td>
<td>Child molesters of girls [n=25]: 16%</td>
<td>Non-aggressive and Aggressive offenders</td>
<td>ns p&gt;.01</td>
</tr>
<tr>
<td></td>
<td>Child mols. of mainly boys [n=25]: 36%</td>
<td>[n=50]: 8%</td>
<td></td>
</tr>
</tbody>
</table>
rule out other variables that might account for the development of sexual abuse perpetration. A number matched the groups by the more basic factors such as sample gender, age, or even socioeconomic status, but few measured other maltreatment experiences that were concurrent with the sexual victimisation (e.g. physical abuse, neglect), which might play a greater role in the subsequent development of sexually abusive behaviour. Many of those studies that did measure these factors, and found that the groups significantly differed with respect to some of them, did not subsequently control for their effects when assessing the significance of the association between sexual victimisation and perpetration (Craissati & McClurg, 1996; Dhawan & Marshall, 1996; Ford & Linney, 1995; Lang & Langevin, 1991). It is therefore possible that in these studies, the relationship found between victimisation and perpetration was spurious.

Two studies did involve the measurement of such additional variables. Awad and Saunders (1991) compared the experience of physical abuse, social isolation and the antisocial behaviour of groups of child molesters (n=45), sexual assaulters (n=49) and juvenile delinquents (n=24), whilst Marshall and Mazzucco (1995) compared child molesters (n=24) and non perpetrators (n=23) for their experiences of similar maltreatment variables. Neither study established significant differences between the groups on these variables. Given the relative methodological sophistication of these studies, more weight can be placed on their findings than on other studies.

A third methodological problem besets all of the above studies and that is the nature of the populations from which the groups were drawn. There is a practical difficulty in identifying a large enough group of child molesters or other sex offenders to allow sufficient power for any significance calculations to be made. As a result, researchers tend to employ samples from clinics, secure units or prisons where there are previously identified groups of such individuals. It is questionable, however, that these groups are representative of the general population of child molesters or other sex offenders who have never been convicted or even arrested for this behaviour.
3.2.2.2 Studies employing community samples

A further group of studies have involved samples drawn from the community. Since the base rate of sexual perpetrators is relatively low in the general population, this requires large numbers of subjects to be screened to identify a small number of such individuals. However the benefit is that the resulting sample is, by definition, representative of the general population of sex offenders. The findings are therefore more widely applicable.

There have been eight studies involving community samples, which have examined the relationship between sexual victimisation and perpetration. However, not all of these drew their samples from the same population, nor investigated exactly the same question. For example with regard to the samples, some studies questioned only college students (e.g. Fischer, 1992) whilst others used samples from large longitudinal cohorts (e.g. Borowsky, Hogan & Ireland, 1997). With regard to the research questions, some examined the relationship between childhood abuse and adult rape of females (Koss & Dinero, 1989) whilst others took sexual molestation of children as the outcome variable and looked at its relationship to prior victimisation (Bagley, Wood & Young, 1994).

One study that addressed this latter issue involved dividing a group of 582 adolescent males into sexual perpetrators and non perpetrators and then establishing the sexual victimisation rates in each group (Fromuth, Burkhart & Webb Jones, 1991). Perpetration was defined as either contact or non contact sexual abuse of a child whilst the definition of victimisation was that employed by Finkelhor (1979). This requires that the perpetrator be over 16 years of age. When such a definition was used, no difference was found in the victimisation rates of the two groups suggesting no relationship between victimisation and perpetration. However, it was argued that this definition was over restrictive, given that there may have been perpetrators who, whilst still under 16 years, sexually abused subjects who were at least 4 or 5 years younger than the perpetrators. Thus there may
Three points should be emphasised in relation to these findings, however. First, 'sexual interest or activity' does not equate to 'sexual activity', i.e. there is a substantial difference between expressing a sexual interest in children and actually perpetrating sexual abuse on them. Factors that predict the former may not predict the latter. Second, the regression resulted in an association being found between the duration of the abuse and the outcome, explicitly not the severity of the abuse and the outcome. This relationship was found to be non-significant (p>.05). Third, the amount of variance accounted for by the experience of childhood sexual victimisation is very small. This begs a question about what other factors may be involved in the development of this behaviour.

Briere and Runtz (1989) also employed an outcome that involved an expression of sexual interest in children, rather than a direct assessment of perpetrating behaviour. Male subjects (n = 193) were asked to rate the likelihood of them having sex with a child if they could be sure they would never be found out or punished. Their ratings were made on a five point Likert scale (1 = very likely, 5 = not likely), but these scores were recoded into a dichotomous classification. Those who rated themselves between levels 1 and 4 were reclassified as having a sexual interest in children, whilst only those who gave themselves a 5 rating were thought to have no interest in children. This appears to be over inclusive. The definition used for prior victimisation also gives cause for concern, being based on having 'bad sex experiences' when young. This could relate to sex with peers as well as with sexual perpetrators and therefore appears too broad a definition to allow meaningful conclusions to be drawn from this study. Bearing these concerns in mind, Briere and Runtz did find that those with negative early sexual experiences rated themselves as more likely to have sex with children if they were never found out (p = .011).

The five remaining community studies focused either on perpetrators against adult victims (Koss & Dinero, 1989) or against a mixture of adult and child victims, i.e. no victim age was specified (e.g. Stevenson & Gajarsky, 1991). All except one (Fischer,
1992) found a statistically significant association between their measures of sexual victimisation and perpetration. The study for which the relationship was not significant involved a sample of 796 male and female college students. Many of the other studies have reported proportions separately for males and females and have found the association to be stronger for males than for females. One possibility, therefore, for the lack of a significant relationship in the Fischer study is that the presence of females in the sample might have reduced the strength of the overall association to below the level of statistical significance.

A final community study, worthy of more detailed description, involved the analysis of data relating to several variables in addition to subjects’ sexual abuse histories and perpetrating behaviour (Borowsky, Hogan & Ireland, 1997). The data were taken from the Minnesota Student Survey, a self-report survey for 71,594 high school pupils (9th and 12th grade) concerning their experience of various risk and protective factors for sexually abusive behaviour. If the additional variables, including physical abuse, witnessing abuse and discontinuity of care, were found to covary with sexual victimisation, they would represent possible alternative explanations for the apparent association between victimisation and perpetration. However, when the effects of these variables were controlled in a logistic regression, the relationship between sexual victimisation and perpetrating behaviour was still statistically significant. This was the case for both male and female subjects and whether the subjects were abused by a family member or by non-family, although the association was marginally stronger for males and for subjects abused by family (see Table 3.3).

<table>
<thead>
<tr>
<th>Table 3.3: Association between sexual victimisation and sexual perpetration (Borowsky et al., 1997)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male subjects</strong> (Odds ratios and 95% confidence intervals)</td>
</tr>
<tr>
<td>Intrafamilial sexual abuse</td>
</tr>
<tr>
<td>Extrafamilial sexual abuse</td>
</tr>
</tbody>
</table>
This last study provides perhaps the strongest evidence of all those described so far in this section for the association between sexual victimisation and perpetration. However it should be stated that the definition used for sexual perpetration in this study does not distinguish between the sexual abuse of adults and children. It also includes cases of verbal coercion rather than just physical coercion. This results in a heterogeneous group of sex offenders making it difficult to draw clear conclusions from the study.

It remains the case that all of the studies reviewed so far employed a retrospective design and, as explained in the introduction to this section, this further limits the interpretations that can be made from the data. To briefly reiterate these problems, they are first that whilst it is crucial that the risk factor preceded the outcome, there is no way of reliably establishing the order of events retrospectively. Second, there is the possibility that subjects could invent or exaggerate their childhood experiences to explain or excuse their own subsequent antisocial behaviour.

To provide solutions to these problems, some kind of prospective design would ideally be adopted. This would make it easier to assess the temporal order of the risk events and the perpetrating behaviour, whilst also making it impossible for perpetrators to exaggerate their childhood risk experiences. If, having controlled for other co-occurring risks, an association was still found, this evidence would be much more indicative of a causal relationship between victimisation and perpetration.

The previous three points represent three of the five criteria suggested by Kazdin et al. (1997) that should be established before a causal relationship can be inferred. The two remaining criteria are that the association is replicable across different samples from the same population, and that there is a plausible mechanism for the relationship between risk and outcome. The first of these requires a number of studies employing a similar design to produce the same findings, whilst the second has been addressed in the previous chapter.
More will be stated with reference to some of these criteria in Chapter 5, including the particular problems inherent in the use of longitudinal designs in research looking at the development of sexually abusive behaviour. Despite these difficulties, however, one final study to be described in this section did involve the use of a longitudinal design to investigate the relationship between sexual victimisation and perpetration (Widom & Ames, 1994). Using court records from between 1967 and 1971, the authors identified three groups of subjects who were victims of sexual abuse, physical abuse or neglect before the age of 12 years. They also identified a control group, matched on age, sex, race and approximate SES. A particular subject's status as perpetrator was established on the basis of official arrest records for rape or sodomy.

As the Widom and Ames (1994) study relied on court records to establish the maltreatment experiences of the subjects, it is less likely that these were invented. Children having to go to court on the basis of their testimonies appear to have less to gain by lying about such maltreatment than adult perpetrators who might be trying to excuse their behaviour.

The authors employed a logistic regression to test whether sex, race, age or type of maltreatment experienced predicted subsequent arrest for sodomy or rape. It was found that, having controlled for the effects of the other variables, the experience of sexual abuse did not predict later arrest (p>.05), although being physically abused did (p<.05).

This result would suggest that there is not a significant relationship between childhood sexual abuse and subsequent arrest for perpetration and this is counter to the findings of most of the retrospective studies described earlier. This may constitute further evidence that convicted sex offenders are likely to exaggerate their experience of childhood maltreatment. It is important to note, however, that the outcome under investigation was not sexual perpetration but being arrested for this behaviour. It is not known how many of those arrested went on to be convicted and it is conceivable that convicted sex offenders are more likely than individuals merely arrested for this offence to have been
victimised in childhood. For example, it may be that former sexual abuse victims are more likely to commit acts of abuse with a greater severity, and that the more serious offences have a higher chance of being carried through to convictions. In any event, it would be dangerous to conclude too much from a single study, especially one in which the base rate of arrests for sexual offences was so low.

3.2.3 Summary

On the basis of the majority of both the comparison and the community studies described above, there appears to be reasonable evidence of a relationship between sexual victimisation and sexual perpetration, although a number of caveats should be stated. First, not all of these studies found a statistically significant association. Second, very few of them attempted to control for the effects of other factors that might account for the relationship. Third, all of the studies that investigated this relationship except one were conducted using a retrospective design, which makes it difficult to establish whether the victimisation preceded or post-dated the first event of perpetrating behaviour. The only study that employed a longitudinal design failed to find a significant relationship once other risk factors were controlled.

There is a need for further studies employing longitudinal designs, which also control for other possible factors. However, it is also clear that sexual victimisation does not inevitably lead to the perpetration of sexual abuse. In the case of those individuals for whom this progression does occur, it appears likely that a number of other factors play some part. The purpose of the next section is to briefly review the evidence for additional variables that may be risk factors for the development of sexually abusive behaviour.
3.3 Other risk factors for the development of sexually abusive behaviour

A number of factors, other than sexual victimisation, have been identified by previous research as having an association with the development of sexually abusive behaviour. These factors include being physically or emotionally abused, witnessing physical abuse of a family member, being neglected and experiencing discontinuity in one’s care arrangements. A few of the studies described in Section 3.2 also examined the relationship between sexual perpetration and a selection of these other risk factors (e.g. Borowsky et al., 1997; Widom & Ames, 1994). Thus, the methodological problems with the studies in this section are similar to those highlighted in that section, and they will not be restated here.

The remainder of this section will comprise a review of the studies that have employed a more rigorous methodology to identify risk factors for the development of sexually abusive behaviour. For example, all of these studies involved the use of at least one comparison group. The evidence for ten variables as risk factors will be outlined, including physical abuse, witnessing intrafamilial violence, emotional abuse, discontinuity of care and neglect.

3.3.1 Physical abuse

At least twelve studies have been conducted that investigated physical abuse as a risk factor for sexually abusive behaviour. However there were differences in their methodologies making comparisons difficult. Those studies that adopted similar approaches will be described together.

Three studies grouped their subjects by the type of sexual offence they had committed and then established the rates of their own physical victimisation (Benoit & Kennedy, 1992; Craissati & McClurg, 1996; Lang & Langevin, 1991). Their results were
inconsistent. Lang and Langevin (1991) employed four different groups of subjects, categorized by the nature of their sexual crimes and compared the proportion each that had experienced physical abuse. The groups and the proportions of each that had experienced physical abuse were as follows: homosexual paedophiles (n = 29; 41.4%); heterosexual paedophiles (n = 66; 33.8%); adult incest offenders (n=36; 55.3%) and a non offender group of community volunteers (n = 50; 0%). These proportions were found to be significantly different between the groups (p<.0001).

However the results of the other two studies contradicted this finding similar rates of physical abuse in the groups they analysed (Benoit & Kennedy, 1992; Craissati & McClurg, 1996). For example, Craissati and McClurg found the following proportions of subjects who had been physically abused: adult child molesters (n = 80; 40%), property offenders (n = 20; 10%), and violent offenders (n = 20; 45%). Although not attempted by Craissati and McClurg, by amalgamating the two non-sex offender groups, an odds ratio can be calculated as a measure of the association between physical abuse and child molestation. This was performed by the current author and was found to be non significant (OR = 1.76; 95% C.I. = 0.77 to 4.01). However, it is possible that the presence of the violent offenders is misleading when addressing this question. For example, experiencing physical abuse may play a causal role in the development of both sexually and physically abusive behaviour, and these findings would be consistent with such an hypothesis (Garber & Hollon, 1991).

A number of other studies did not distinguish between the type of sex offences committed by their sexual perpetrator groups, e.g. they combined rapists with child molesters. This limits the interpretations that can be drawn from such studies in respect of child molesters alone and may even produce misleading results. It is possible that a continuity only exists between childhood sexual victimisation and subsequent sexual abuse of children in adulthood. Thus the presence of rapists in the same group as child molesters would undermine this relationship, perhaps reducing it to non significance. Indeed, the results from these studies are inconsistent with some evidence being found in favour of the
continuity (Dutton & Hart, 1992) and some against (Fagan & Wexler, 1988; Spaccarelli, Bowden, Coatsworth & Kim, 1997).

Three further studies warrant some attention. Zgourides, Monto, and Harris (1997) compared the proportions of adolescent sexual offenders (n=80; 56%) and adolescent non-offenders (n=96; 21%) who had been physically abused. This constitutes a significant difference (OR = 4.89; 95% CI = 2.53 to 9.49), as calculated by the current author. A significant association was found between physical abuse and sexual perpetration even after the effect of sexual abuse had been controlled in a logistic regression (adjusted OR = 2.09, p<.01). This strengthens the case for physical abuse being a risk factor.

However, the community study by Borowsky et al. (1997) found no such association after performing a similar analysis, controlling for the effects of other variables (adjusted OR = 1.07; 95% CI = 0.87 to 1.32). This was despite the fact that sexual perpetrators reported experiencing significantly more physical abuse than the non-perpetrating subjects (OR = 4.51; 95% CI = 4.03 to 5.09). Such a finding highlights the importance of addressing the question of spuriousness when investigating relationships between variables. It also makes it difficult to draw any clear conclusions about physical abuse as a risk factor for sexual perpetration. The possibility should be mentioned, though, that the problem of the over-inclusive definition of perpetration in this study, which was highlighted earlier, might have distorted the results. This could be a reason for the lack of significant findings.

The final study does provide stronger evidence that physical abuse is a risk factor for this outcome as it involved both a longitudinal design and an attempt to control for the effects of other factors (Widom & Ames, 1994). As stated in the previous section, these authors found that being physically abused was a significant predictor of subsequent arrest for rape or sodomy (p<.05) having controlled for age and ethnicity. As a result of these more rigorous methodological features, the association between physical abuse and sexual perpetration is less likely to be spurious. However, it should also be noted that until
further confirmation is found of this relationship, these findings should be taken as indicative rather than as definitive proof, especially in the light of the contradictory retrospective evidence.

3.3.2 Witnessing intrafamilial violence

The experience of being a witness to physical abuse between family members, which typically involves a male carer assaulting the mother figure, has been hypothesised to play a role in the development of sexually abusive behaviour. Four studies have examined this link whilst including a comparison group in their design (Borowsky et al., 1997; Fagan & Wexler, 1988; Spaccarelli et al., 1997; Skuse et al., 1998). Their results will be described in turn.

Fagan and Wexler (1988) compared the proportion of juvenile sex offenders (n=34) who reported witnessing parental violence with that of juvenile violent offenders (n=208) and found that the sex offenders were less likely to make such reports. However the authors did not state whether this difference was statistically significant.

The other three studies found the opposite result. Spaccarelli et al. (1997) combined two groups of juvenile sex offenders identified by self report (n=26) and by arrest data (n=24) and found that they were more likely to report being exposed to adult violence involving weapons than a group of low violence offenders (n=54) ($\chi^2=10.78$, $p<.001$). Although a similar comparison with a group of high violence offenders (n=106) resulted in no significant differences ($\chi^2=1.83$, ns), this does not necessarily imply that witnessing violence is not causally involved in the aetiology of sex offending, as has been explained earlier (Garber & Hollon, 1991).

Skuse et al. (1998) examined the childhood experiences of 25 sexually abused adolescent males (aged between 11 years and 15 years 11 months) of whom 11 had gone on to
perpetrate sexually themselves. The authors found that witnessing intrafamilial violence was associated with an increased risk of being in the sexually abusive group (unadjusted OR = 8.1; CI = 1.2 to 53.2). It was established that these events had occurred prior to the onset of the sexually abusive behaviour. In addition, when entered into a logistic regression having controlled for other relevant factors, witnessing intrafamilial violence was found to significantly predict group membership (adjusted OR = 39.7; CI = 1.1 to 1472.6).

Finally, in the community study by Borowsky et al. (1997), witnessing intrafamilial violence was also found to be a significant predictor of self-reporting sexual perpetration using force. This was the case even after controlling for the effects of other risk factors (OR = 1.43; 95% CI = 1.18 to 1.72). The community nature of this sample gives more credibility to these findings as some of the biases inherent in samples obtained from official records (e.g. police, prison, health clinic) will have been avoided. However, the effect size of this finding does not appear particularly impressive and the results require replication. In addition, it is worth mentioning again that the over inclusive definition used for sexual perpetration might cause further difficulties in drawing clear conclusions from this study.

### 3.3.3 Emotional abuse

A similarly small number of studies have addressed the question of whether the experience of emotional abuse predicts sexual perpetration. With one exception, they have found that it does not. However, emotional abuse is a notoriously difficult concept to define (McGee & Wolfe, 1991) typically comprising an apparently unconnected range of behaviours whose only common feature is that they do not appear to fit within any of the other maltreatment subtypes. The studies that have investigated the relationship between emotional abuse and sexual perpetration have tended to employ measures that
Marshall and Mazzucco (1995) compared the amount of rejection experienced by adult child molesters (n=24) and a non-criminal comparison group (n=23) using the self-report Parental Acceptance–Rejection Questionnaire (Rohner, 1976). The authors reported that they found no differences between the two groups with respect to both paternal and maternal rejection. Although Ford and Linney (1995), using the Conflict Tactic Scale (Straus, 1979), found that child molesters (n=21; mean = 35.4) had experienced higher levels of parental verbal aggression than violent non-sexual offenders (n=26; mean = 28.0), status offenders (n=21; mean = 26.4) and adolescent male rapists (n=14; mean = 25.9), the difference was not statistically significant. This could have been due to the small size of the groups, however.

Craissati and McClurg (1996) also found no differences between the experiences of 'emotional neglect' of a group of adult child molesters (n=80), violent offenders (n=20) and property offenders (n=20). This variable was not defined by the authors, however, nor was it stated how it was measured. It is therefore not clear how to interpret this finding.

Finally, the community study of Bagley et al. (1994) did find an association between the experience of emotional abuse and having subsequent sexual interest or an involvement in sexual activities with children and young males. This association was reported to be r = .25 (p<.01) for interest/activities with young males aged 13–15 years and r = .23 (p<.01) for interest/activities with children. It is possible that the subjects' experience of sexual abuse, not emotional abuse, accounts for these correlations. This is because sexual abuse and emotional abuse were themselves significantly correlated (r = .41, p<.01) and a significant relationship had been previously found between being sexually abused and having a subsequent sexual interest in children or young males. No attempt was made in
this analysis to establish the independent effect of emotional abuse by first controlling for the effects of sexual abuse.

The evidence that emotional abuse represents a risk factor for subsequent sexually abusive behaviour is therefore weak, at best. This may be due to inherent difficulties that exist in comprehensively defining the concept. However, until this is achieved, there can be no definitive conclusion about the effect of emotional abuse on this or any outcome.

3.3.4 Discontinuity of Care

The idea that discontinuities in the care arrangements of children and adolescents might play some part in the subsequent development of sexually abusive behaviour is one that has rarely been tested. When this has occurred, little evidence has been found in support of the hypothesis. Although a study by James and Neil (1996) found that an apparently high proportion (42%) of sex offenders had experienced separation from at least one of their parents by the age of 18 years, no comparison groups were investigated. Thus there is no way of telling whether this proportion really is high. In addition, the separation may have followed the onset of the subject's sexual offending, in which case it could not be considered to be a risk factor.

Most of the studies that have compared sex offenders with non sex offenders have failed to find a difference between them in respect of their care histories. Borowsky et al. (1997) found that living with one biological parent, as opposed to any other living arrangement, was associated with sexual perpetration (OR = 1.25; 95% CI = 1.11 to 1.40). However this measure does not indicate the number of separations that may have occurred, merely the living situation at the time of the assessment. The non perpetrators could conceivably have experienced more separations than the perpetrators. Even more critically, the above association did not remain significant when other possible risk factors were controlled.
In another study, Fromuth, Burkhart and Webb Jones (1991) found that a group of college students who had self reported that they had committed sex offences (n=16) were no more likely than their fellow, non sex offending college students (n=566) to have spent more than a year away from their fathers before the age of 16 years. This is a far from perfect measure of discontinuity of care, but does at least give some indication of stability in the subjects' care arrangements.

It would seem that this particular variable does not hold much promise as a risk factor for sexually abusive behaviour. However the study by Skuse et al. (1998) did provide at least some support for this possibility. Investigating a group of sexually victimised adolescent males, the authors found that a sub-group who had subsequently perpetrated sexually (n=11) were more likely to have experienced parental marital breakdown or some time in local authority care than a comparison group of non perpetrators (n=14) (unadjusted OR = 7.2; CI = 1.1 to 48.6). It was established that the discontinuity of care had occurred prior to the onset of the sexually abusive behaviour. Conclusions from this study can only be tentative, however, owing to the relatively small samples and the retrospective nature of the design.

In summary, therefore, it appears that the evidence for the significance of discontinuity of care in the development of sexually abusive behaviour is weak, although very few studies have examined this issue. Those that have assessed this factor have tended to use different definitions, but discontinuity of care has never emerged as a significant risk factor when other factors have been controlled.

3.3.5 Physical neglect

Only one study has investigated whether neglected individuals are at heightened risk of developing into sex offenders (Widom & Ames, 1994). Hence little can be concluded
from such a limited assessment. In fact, the authors found that victims of neglect were no more likely than non victims to be subsequently arrested for rape or sodomy. However the definition used in this study for the sex offending outcome is a rather restricted one, and this is likely to have resulted in a large number of false negatives, i.e. subjects who had sexually perpetrated and had not been arrested for it or subjects who had been arrested for sexual offences not involving rape or sodomy. It is difficult to know what the effect of reclassifying such individuals as sex offenders might be. It is certainly clear that further studies are necessary regarding the effects of neglect on the development of sexually abusive behaviour.

3.3.6 Social rejection

Another factor that is often thought to represent a risk for subsequent sexual offending is having few friendships, or ones of poor quality. A number of studies have been conducted that have addressed this possibility by comparing groups of adult or adolescent sex offenders with similar aged non-sex offenders on some measure of sociability (e.g. Craissati & McClurg 1996; Haywood, Kravitz, Wasyliw, Goldberg & Cavanaugh, 1996). The only one of these to find a significant difference between such groups was the Craissati and McClurg (1996) study. This involved a comparison of the self reported rates of contact with friends of adult child molesters (n=80), violent offenders (n=20) and property offenders (n=20). The child molesters reported the least contact, with 30% of them stating that they did not have any such contact, whilst only 5% of violent offenders and 0% of property offenders also had none (p<.001). The proportions of the three groups that had been victims of bullying were also investigated as a further indication of social rejection. Again the child molesters (45%) reported the most, with the property offenders next (10%) and the violent offenders predictably reporting the least (5%) (p<.001).
Although these findings are statistically significant and consistent with the hypothesis that was alluded to above, they represent only weak support. The problem is that the temporal order of the contact with friends or the bullying is not clear with respect to the onset of their sexually abusive behaviour. It is quite possible that if a causal relationship exists, it is in the opposite direction, i.e. that molesting children causes a decline in contact with friends and an increase in the rate of bullying suffered. It is likely that once their offending behaviour came to light, there would be a sharp tailing off of the number of former friends who would want to be associated with such an individual. Similarly, there might be an increase in the amount of bullying inflicted on a known child molester following the disclosure of his abusive behaviour. For these results to provide support for the hypothesis that social rejection is a risk factor for sexually abusive behaviour, it would therefore be necessary to show that the bullying and the social rejection preceded the onset of the abusive behaviour.

No other study found a difference between sex offenders and non sex offenders in the extent of their social rejection, whether they were adolescent (Fagan & Wexler, 1988; Ford & Linney, 1995) or adults (Haywood et al., 1996) although the measures used in each were vastly different. The only study that involved a community sample also failed to find a significant difference in the extent of the social isolation experienced by self reported child molesters, as measured by the number of good friends at age 12 years (Fromuth et al., 1991). This study at least went some way to address the problem of temporal order although the small number of child molesters (n=16) would have made it difficult to produce a significant finding.

Thus, the evidence for social rejection as a risk factor for sexually abusive behaviour is currently weak and the hypothesis requires considerable further investigation.
3.3.7 Antisocial behaviour

The possible association between exhibiting non-sexual antisocial behaviour and subsequent sexual perpetration is one that has been investigated in four studies. Only one reported a significant relationship between these variables (Borowsky et al., 1997). These authors assessed antisocial behaviour using dichotomous measures of self-reported current and former gang membership and ‘hanging out’ for more than 40 hours per week and found that for males, all three were associated with having forced someone into a sexual act.

However the three other studies, who all used samples of convicted sex offenders compared with non sexual offenders, found no such association. Haapasalo and Kankkonen (1997) assessed adult rapists (n=16) and violent offenders (n=16) for the number of symptoms of conduct disorder exhibited prior to age 15 years. They found no significant differences between the groups. Ford and Linney (1995) found that compared with the other groups measured, a group of violent offenders had the highest proportion (74%) who had experienced three or more school suspensions. The other groups included child molesters (43%), adult rapists (57%) and status offenders (57%) and the difference, although approaching significance, was not so (p<.10). Similarly, Fagan and Wexler (1988) found that a group of violent offenders had committed 50% more deviant acts than a comparison group of juvenile sex offenders in the year leading up to the interview.

Of course, the fact that there may not be any difference in the antisocial behaviour exhibited by sex offenders and violent offenders does not rule out the possibility that this factor may play a part in the development of both behaviours. It would be necessary to identify further meaningful comparison groups and demonstrate no differences before the relevance of antisocial behaviour could be discounted. In addition, it would seem likely that the selection of other convicted offenders to compare with sex offenders would result in few differences with respect to deviant behaviour, as they have all by definition subsequently engaged in socially deviant acts.
In summary, there is at best weak evidence that antisocial behaviour is a risk factor for sexually abusive behaviour. Current research suggests that antisocial acts have been previously performed by many different types of incarcerated offenders, not specifically sexually abusive individuals.

### 3.3.8 Intelligence

One variable that appears to be consistently lower in groups of child molesters than in other groups is intelligence. Lang and Langevin (1991) compared the educational level reached by groups of adult heterosexual paedophiles ($n=66$), homosexual paedophiles ($n=29$), incest offenders ($n=36$) and a group of volunteers from the community ($n=50$). They found that the community volunteers had attained the highest level by a significant amount ($p<.0001$). Craissati and McClurg (1996) found that a higher proportion of child molesters ($n=80$; 15%) than violent offenders ($n=20$; 5%) or property offenders ($n=20$; 0%) had attended a special school. Furthermore, Haywood et al. (1996) reported that child molesters, both cleric ($n=24$) and non-cleric ($n=45$) had reached lower educational levels than their respective non sexually offending cleric ($n=48$) and non cleric ($n=40$) comparison groups.

Although intelligence is relatively consistent over time, it is usually measured by some indirect means that might be affected by other factors. For example, educational level is sometimes used as the measure of intelligence but this may also be affected by other factors such as socioeconomic status or parental aspirations. It might also be affected by the onset of sexually deviant behaviour such that an individual who was found to be abusing younger children might achieve a lower educational level as a result of the intervention that follows, e.g. being moved to a different school for other deviant individuals. Ideally, to reduce the possibility of a spurious association, intelligence should be assessed using a continuous measure of IQ.
One study that did assess intelligence using an IQ test found that groups of male adolescent rapists (n=14), child molesters (n=21), violent offenders (n=26) and status offenders (n=21) did not differ in terms of the proportions who were in the low average range or the borderline-mentally retarded range (Ford & Linney, 1995). Borowsky et al. (1997) also failed to find a difference in the usual grades received by perpetrators and non perpetrators in their community sample of high school students.

Thus, although several studies have apparently found lower levels of intelligence amongst child molesters, the results are not entirely consistent, and there is a need for research that employs a more valid measure of intelligence.

3.3.9 Other possible risk factors

Two other factors warrant some mention in this chapter as they have been investigated, albeit rarely, for the role they might play in the development of sexually abusive behaviour. The first is referred to here as a ‘pervasive sexual atmosphere’ that may exist in the home of individuals who may then be at increased risk of becoming sexual perpetrators. A pervasive sexual atmosphere would exist if the subject was inappropriately exposed to deviant sexual behaviours. This might be characterised by sexual offending involving the subject’s family members, either as victims or perpetrators. It may also involve exposure to pornography.

Only one study has compared groups of sex offenders and non sex offenders in their exposure to such deviance (Ford & Linney, 1995). They assessed groups of male adolescent rapists (n=14), child molesters (n=21), violent offenders (n=26) and status offenders (n=21) on a number of measures relating to exposure to pornography and sexually explicit films. Age at first exposure to pornographic magazines was found to be significantly lower for the sex offenders than for the non offenders (p<.05). There are
other studies that have found apparently high proportions of exposure to a pervasive sexual atmosphere but have failed to provide comparisons. As stated above, this makes it impossible to draw sensible conclusions.

Finally the rates of psychopathology in sex offenders has been the subject of only a little attention from researchers. Three studies have investigated this particular factor. Bagley et al. (1994) found that a number of measures of psychopathological symptoms predicted sexual interest or activities with children, having carried out a multiple regression. These included depression, suicidal ideation, suicidal behaviour, and trauma related symptoms. However only a very small amount of variance in the outcome was accounted for by these measures.

Haywood et al. (1996) compared cleric child molesters with cleric non offenders, and non cleric child molesters with non cleric non offenders on a similar range of psychopathologies. The two cleric groups differed on measures of depression, hysteria, psychopathic deviate, psychasthenia and schizophrenia, with the child molesters having higher rates on each of these \( p<.001 \). The non cleric groups differed only on the psychopathic deviate and schizophrenia measures with the child molesters again showing higher rates on both of these \( p<.001 \).

Conversely, Spaccarelli et al. (1997) found no differences between adolescent sex offenders \( (n=50) \), low violence offenders \( (n=54) \) and high violence offenders \( (n=106) \) on a range of measures of psychopathology including dissociation, depression and rumination.

### 3.4 Conclusion

It is apparent from the above review that very few of the many variables that have been hypothesised to be risk factors for the development of sexually abusive behaviour in
males have had adequate evidence generated in support of their status as risk factors. This is partly as a result of weaknesses in the research designs, particularly the overemphasis on retrospective studies in which the temporal order of events cannot be satisfactorily established. Thus it is impossible to tell whether a factor represents a risk for, or an outcome of, sexual perpetration.

The strongest candidate appears to be the experience of sexual victimisation in childhood and this factor has undoubtedly been the most widely investigated. The evidence, although largely retrospective and not entirely one-sided, does point towards a likely relationship with sexual perpetration. Unfortunately, the one study that employed a longitudinal design found that childhood sexual victimisation did not predict subsequent sexual perpetration once other possible risk factors were controlled. There is clearly a need for further investigations employing longitudinal designs.

A number of other factors also warrant further investigation, either because the current evidence is suggestive that they represent risk factors for sexual perpetration, or because they have not been adequately studied to date allowing no conclusions to be made either way. Factors coming under the former category include experiencing physical abuse and witnessing domestic violence whilst those in the latter category include emotional abuse and physical neglect.

Despite the need for continued research to find stronger evidence that certain variables represent risk factors for sexually abusive behaviour in males, it is likely that the main factors that contribute to this outcome have been identified. Thus, individuals who are exposed to such factors in early life are placed at risk of subsequently developing perpetrating behaviour. It is therefore crucial that we also identify those factors that might protect against this outcome in individuals who have formerly been exposed to such risk. The next chapter will involve a detailed examination of what is currently known about these 'protective factors'.
Chapter Four  Protective factors

4.1 Introduction

In the previous chapter, the empirical evidence for the significance of certain key risk factors in the development of sexually abusive behaviour was reviewed. It was concluded that, as a result of problems with the methodologies of the majority of the studies, none of the risk factors could be established as being causally linked to this outcome. However, a number of associations have been found that might suggest certain factors are important in the aetiology of sexually abusive behaviour. Given the urgent need to increase our understanding of the development of this behaviour, further validation of these variables as risk factors has been attempted in this study. This is described in the subsequent chapters.

The analysis of the effects of various risks on subsequent development represents only half of the focus of developmental psychopathology. The role of 'protection' represents the other half of this approach, which is currently less well understood. However an increasing appreciation of the complexity of developmental pathways as well as the diversity in potential outcomes has encouraged a greater interest in the study of protective processes (Cicchetti & Garmezy, 1993).

It is often found that, despite some individuals being exposed to severe and long-term risks, a large number function surprisingly well in their adult lives (e.g. Paykel, 1978; Rutter & Quinton, 1984). These individuals might therefore be termed 'resilient'. More pertinent to the subject of this thesis is the fact that although the experience of sexual abuse in childhood may be an important factor in the development of sexually abusive behaviour in adolescent and adult male perpetrators, not all such victims go on to exhibit this outcome (Browne & Finkelhor, 1986; Hanson & Slater, 1988). This raises the possibility that other factors are operating which mitigate the negative effects of risk factors. These are widely referred to as 'protective factors'.
It is therefore hypothesised, within the approach of developmental psychopathology, that outcomes are dependent on the interplay between risk and protective factors (Sroufe & Rutter, 1984). In general terms, the experience of risk on its own would increase the likelihood of a particular negative outcome. With the additional presence of protection this likelihood would increase by less and, at best, disappear altogether.

The establishment of the presence and effects of protective factors is, therefore, clearly of great importance when attempting to understand the development of sexually abusive behaviour. As stated in Chapter 1 (Section 1.3.5), it may also be particularly helpful when planning effective intervention strategies to prevent this behaviour developing (Widom, 1999) in individuals who are at risk.

The purpose of this chapter, therefore, is to review the literature on resilience in an attempt to establish which factors have been identified as protecting against the development of sexually abusive behaviour in individuals who are exposed to such abuse in childhood. Before reviewing the evidence for protective factors identified from abused populations, however, it is necessary to describe the key definitions and concepts that relate to the subject of resilience.

### 4.2 Key definitions

There are a number of important terms in this literature that require clarification, either because they have a number of different possible meanings or because they are commonly used incorrectly. Three such terms will be described in detail in this section: 'resilience', the 'protective factor' and the 'protective process'. The way they are defined has a large bearing on the methodology and analysis adopted in any study examining their importance. For each of these terms, a definition will first of all be given, followed by a review of the issues that have arisen in research involving their use, and suggestions about their use in future research.
4.2.1 Resilience

The first of these terms is the word 'resilience'. Resilience is a characteristic of certain individuals who, despite having experienced disadvantage were able to adapt, thereby developing and maintaining positive outcomes. Thus Masten, Best and Garmezy (1990) define resilience as:

"...the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances." (p. 425)

There are at least three major problems with the research that has been conducted to date about resilience. First, although the relatively general conceptualisation of resilience given above probably subsumes most researchers' definitions of the term, there is in fact no one standard definition for resilience. Thus, the term 'resilience' has been used in different studies to describe different concepts. This leads to difficulties when attempting to draw meaningful conclusions about resilience from these studies. In addition, while this term continues to be used inconsistently, there is no clear direction to follow for researchers wanting to investigate this area. The standardisation of the definitions of terms must be the first step to allow understanding in any research area to move forward.

A second, and related problem is that there are no standard instruments to measure resilience. Thus even if two different studies use the same definition of resilience, it is quite possible that by using different instruments to measure it, they could produce markedly different values.

A reliance on the conceptualisation of resilience given above to guide research has lead to a third major problem. There has been no consistency in researchers' interpretations of the term "successful adaptation" which is so fundamental to this definition (Lam & Grossman, 1997). Luthar (1993) identified a number methodological issues connected with this problem, which can be subsumed under two main subject headings: the non-comparability of findings and the failure to address the variability of adaptation over time. These are described in turn below.
4.2.1.1 Non-comparability of findings

The first main issue, therefore, relates to the lack of comparability between the findings of studies assessing resilience, depending on the method used to establish successful adaptation. The extent to which an individual has adapted to adverse circumstances is typically assessed by one of two broad methods: via the measurement of a number of different aspects of 'competent' functioning (e.g. cognitive abilities, self-esteem) (Cicchetti, Rogosch, Lynch & Holt, 1993) or by the measurement of a single factor. The single factor may be one whose absence is indicative of adaptation (e.g. depression: Moran & Eckenrode, 1992) or whose presence is indicative of same (e.g. self-esteem: Liem, James, O'Toole, & Boudewyn, 1997). There are difficulties with both the single factor and the multiple factor approaches.

4.2.1.1.1 Definition using a single factor

Those definitions that require measurement of a single factor as the criterion for resilience can be criticised as being inadequate in their scope. One of the most common ways resilience is established involves an assessment of 'overt social competence' (Luthar, 1993). Whilst recognising the usefulness of this definition in gauging an individual's ability to cope with life's transitions in spite of high risk, Luthar suggested that it gives an incomplete picture of resilience. If other more covert mental health indices were also employed, they might indicate that socially competent individuals exhibit poor adjustment in other ways (e.g. internalising problems).

In addition, Luthar pointed out that assessments of adjustment vary in 'at risk' individuals even across the domain of social competence. For example, in a previous study, Luthar (1991) found that the social competence ratings of a group of subjects were different depending on whether their teachers or their peers assessed them.

4.2.1.1.2 Definition using multiple factors

There are also problems with the use of broad ranging definitions of resilience involving the assessment of 'competence'. In these studies, resilience is established using a number of conceptually different outcome measures that the investigators consider to be aspects of competence. These often assess qualities such as cognitive
and social abilities and self esteem, but there is no standardised combination of measures that define resilience. The subjects' scores are then typically combined to give an overall index of competence (Cicchetti, Rogosch, Lynch & Holt, 1993; Herrenkohl, Herrenkohl & Egolf, 1994). Individuals who appear in the top 40% of this index, for example, are classified as resilient.

However, it is difficult to draw consistent conclusions about resilience from studies such as these for two main reasons. First, there is no standard range of measures forming the criteria from which competence is established using this multiple factor approach. Second, there is huge variation in the performance of ‘at risk’ individuals across the different measures that are used.

As a result of the many different definitions of “successful adaptation” currently used within both the single factor and multiple factor approaches, it is clear that there are difficulties in comparing the findings of these studies. These difficulties can apply even when two studies using these different approaches investigate resilience in the face of the same risk factor (Cicchetti & Garmezy, 1993; Kaufman, Cook, Arny, Jones, & Pittinsky, 1994). This is because the number and characteristics of individuals who are classed as resilient in such studies are likely to be vastly different. As a result, the factors that are assumed to be protective against the effects of a certain risk factor as a result of their positive association with an index of competence (multiple factor approach) are often different to those that are assumed to be protective against the same risk factor because of their negative association with one particular psychopathological outcome (single factor approach). This relates to the fact that there is a considerable conceptual difference between the presence of a range of adaptive abilities and the absence of a particular pathology. Currently both outcomes are interpreted as being ‘resilience’, which leads to confusion and lack of consistency in the factors that are established as being associated with resilience.

**4.2.1.2 Variability of adaptation over time**

The second main issue relates to the inadequacy of most research about resilience in that data on outcome are usually only collected at a single time point. This applies irrespective of whether the studies employed a multiple or a single factor definition of
resilience. It has often been stated that the extent to which an individual displays resilience can vary over time (e.g. Liem et al., 1997; Rutter, 1985). Successful adaptation at one point may predict, but certainly does not guarantee the same at another (Cicchetti & Schneider-Rosen, 1986; Herrenkohl et al., 1994). To obtain an accurate assessment of resilience, it is necessary to make outcome measurements at more than one time point.

The findings of a study by Herrenkohl et al. (1994) are consistent with this point. These authors measured the cognitive/academic, social and emotional functioning, as well as the physical well being of a group of pre-school children who were using the services of child welfare agencies specialising in abuse and protective services. The measurements were taken both when the children were in elementary school and then in late adolescence. Of the 25 high functioning subjects at the elementary school stage, only 23 were followed up and of these, only 14 were still high functioning according to the criteria used during late adolescence.

Unfortunately the number of children assessed in this study was too low to permit any analysis of statistical significance and the measures used to assess resilience for the subjects in late adolescence were of questionable validity. In addition, variation in functioning at different time points may, at least in part, relate to developmental changes rather than time-related variability in adaptation to negative events. However, the study is consistent with the idea that the measurement of resilience at a single time point, the usual strategy employed in resilience studies, will probably provide a misleading picture of what is associated with a resilient outcome in individuals previously exposed to risk.

4.2.1.3 Future directions
Luthar (1993) suggested that assessing 'at risk' subjects using a selection of measures of competence and presenting a subset of them as resilient in a general or "overall" sense is misleading and imprecise. She concluded that research should rather focus on more specific and constrained aspects of both resilience and vulnerability. In this way 'at risk' subjects could be assessed as, for example, displaying academic and emotional resilience, whilst being vulnerable in the social sphere.
In providing a clear and distinct definition of resilience, it is also necessary to distinguish it from the concept of invulnerability. The latter term is an early attempt to capture the notion of resistance to stress and implies an almost mythical ability to retain adaptive functioning despite experiencing a number of possible risks (Cicchetti, & Garmezy, 1993). However, there is an increasing recognition that this is too simplistic an understanding of resistance to risk. The concept of resilience is seen as a relative not an absolute term (Rutter, 1985), which involves the complex interplay of stressors with the individual’s own resilient qualities as well as environmental influences which assist this. This complexity can result in resilience varying over time, as stated above, as well as over different domains of functioning, such that an individual who is adaptive in one domain may not be so in another (Liem et al., 1997).

4.2.2 Protective factors

Two concepts closely related to resilience are those of the protective factor and the protective process. Put simply, protective factors are variables that promote resilience by means of protective processes. However there is some disagreement in the literature about the precise definition of the term ‘protective factor’. There are two main models, the ‘interaction effect model’ and the ‘main effect model’, and depending on which is used there are clear consequences with respect to the analysis and interpretation of any data set (Luthar, 1993). These two approaches will therefore be described and analysed, before the importance of the protective process is outlined.

4.2.2.1 Interaction effect model

The interaction effect approach, espoused by Garmezy, Masten and Tellegen (1984) and Rutter (1987), regards the protective factor as a variable that, via an interaction with a risk factor, reduces the negative effect of that risk. The important aspect to be emphasised is the presence of an interaction between the risk and protective factors. Thus, the protective factor moderates the effect of risk (Baron & Kenny, 1986) and is therefore sometimes referred to as a moderator. This is represented in Figure 4.1 below. Under conditions of high risk, the protective factor has the effect of reducing
Figure 4.1 Model of an ‘interaction effect’ protective factor

Figure 4.2 Model of a ‘main effect’ protective factor
the magnitude of the negative outcome that would normally occur in the absence of any protection. However, under low risk conditions, the protective factor should have little or no effect of its own on outcome.

Studies that attempt to identify protective factors defined in this way usually look for statistical interactions between specific protective factors and risk factors, preferably selected on the basis of theory. This is done by comparing outcomes for a high-risk group with those of a low-risk group, with respect to their experience of a particular protective factor.

Depending on the nature of the variables under assessment, the interaction of a protective factor with a risk factor can be statistically established by building up a regression model (e.g. multiple or logistic regression) (Baron & Kenny, 1986). The individual risk and protective factor terms are entered first into the model in order to control for their main effects on outcome. The interaction term is subsequently entered and if it accounts for a statistically significant amount of the variance, an interaction effect is assumed. Although the multiplicative interaction, tested for in such multivariate analyses, is only one particular type of interaction effect (Rutter, 1987) significant interactions are usually considered sufficient evidence of moderating mechanisms involving risk and protective factors (Kessler, 1983; Luthar & Zigler, 1991).

4.2.2.2 Main effect model
Proponents of the alternative 'main effect' model define protective factors as those variables that are significantly associated with resilient outcomes under conditions of high risk. They do not attempt to establish that these factors have no effect under low risk situations. Studies that search for protective factors defined in this way use samples of subjects who have all experienced high risk and then establish which variables distinguish the subjects who go on to display resilience from those who do not. Thus they are looking for factors that have a main effect on a resilient outcome (see Figure 4.2).
Main effects models typically consist of positive experiences or factors that, by their direct action, predispose an individual to a favourable outcome, irrespective of the level of risk. Protective factors, as defined in the interaction effect model, would ideally only have a moderating effect under adverse conditions, having no direct effect on outcome at all (i.e. they do not act in the absence of risk). Investigators who prefer the interaction effect model refer to factors that have a positive main effect on the outcome as 'compensatory' rather than 'protective' (Garmezy et al., 1984).

Some recent investigations into resilience have not made any distinction between main effects and interaction effects in their definitions of protective factors (e.g. Werner & Smith, 1992). What, then, is the justification for defining protective factors in this somewhat restrictive and precise sense? Rutter (1987) emphasises the need for any concept of a protective factor to be more than just the opposite end of the same continuum as a risk factor. If this were the case, protection would merely constitute the absence of risk. Protective factors would simply be risk factors that, as a result of some arbitrary decision, had been turned on their heads and reverse scored.

For example, let us imagine that the variable 'social rejection in childhood' has a significant association with adult psychopathology, (i.e. it is a risk factor for adult psychopathology). Subjects would have been rated 'zero' on this variable if they had experienced no social rejection in childhood, and '10' if they had experienced maximum rejection. Employing the main effect approach means that there would be nothing to stop researchers from turning this factor upside down, changing its name to 'social acceptance in childhood' and calling it a protective factor. Subjects who had been '10' on 'social rejection' would now be scored as '0' on 'social acceptance' and a similar change would take place for scores on the opposite extreme of the variable. The new variable would, of course, have a significant negative association with adult psychopathology and would hence be a protective factor against this outcome, according to this model. However, no new variance in this outcome would be accounted for over and above that already accounted for by the risk factor 'social rejection'.
There would therefore be no conceptual difference between risk and protection, simply an arbitrary decision on what to call a particular factor, and the two models would hence account for largely the same variance in outcome (Jessor, Van Den Bos, Vanderryn, Costa & Turbin, 1995). Thus, such a concept of protection would add little to our understanding of the development of a particular outcome beyond that explained by the risk model. On the other hand, protection as defined by the interaction model is clearly conceptually different from the risk model, and will add to statistical prediction.

In addition, finding a significant interaction effect might give a clue about the mechanism that resulted in the protective process. It seems reasonable to suppose that if the important risk and protective factors are identified, because their interaction has been shown to be responsible for a reduction in the likelihood of an adverse outcome, this might allow plausible hypotheses to be made about the protective process that resulted in this reduction. The importance of considering such processes is referred to below.

A more semantic point relates to the use of the word ‘protective’, which according to the Oxford English Dictionary implies that there is something against which a defence is needed. It is argued, therefore that it is illogical to employ the word ‘protective’ to describe a variable that has the same magnitude of effect on outcome irrespective of whether a risk factor is present or absent. As it is important to make a distinction between these two models, it makes sense to use appropriate words from the common lexicon.

Although this may seem to be merely a matter of pedantry, there is actually a great deal of confusion relating to the correct use of terms (Luthar, 1993). This is reflected in more recent literature in which the term ‘protective factor’ is used interchangeably to describe first one and then the other model (Rolf, Masten, Cicchetti, Nuechterlein & Weintraub, 1990). There is clearly a need for standard definitions within any area of research to enable comparisons between studies and replication of previous work.
In concluding about which of the two approaches is the most appropriate to take, Luthar identifies weaknesses in both. Regarding the interaction effect model, she refers to the difficulties that exist in establishing, and then correctly interpreting interaction effects. The first problem relates to the small amount of variance that is typically accounted for by interaction effects in non-experimental designs, which makes finding a significant effect very difficult (McClelland & Judd, 1993). McClelland and Judd (1993) state that in a non-experimental field study, finding a significant interaction that accounted for as little as 1% of the total variance would be noteworthy. Thus there are recognised difficulties in identifying protective factors defined according to this model.

The second problem relates to the complexities of making a correct interpretation of a significant interaction effect. The problem centres on the fact that the multiplication of risk factor scores by protective factor scores, such as occurs when testing for interactions, results in numbers that are, in themselves, psychologically meaningless. In order to obtain a meaningful interpretation of a significant interaction, further investigation is necessary into the nature of the interaction. As with the interpretation of all results, it is necessary to select the correct statistical technique to allow sound conclusions to be drawn (Aiken & West, 1991). Unfortunately, there is some disagreement amongst statisticians about what constitutes the correct technique (Kessler, 1983).

According to Luthar, the biggest problem with the main effects model relates to limitations in what can be concluded from any findings. It constitutes, she believes, a much more parsimonious model with none of the statistical complexities associated with the interaction effects model. The main drawback lies in the fact that it merely uncovers a series of significant associations between certain factors and a resilient outcome, which gives little information about mechanisms.

However, Luthar fails to acknowledge what might be considered a more important point, namely that when defined as risk factors turned on their heads, protective factors are conceptually redundant. She states that the main effect model constitutes a more parsimonious one than the interaction effect model, and it certainly involves
more straightforward statistical techniques. There is perhaps a stronger argument, though, that it would be more parsimonious still to dispense entirely with the main effect model of protection, since it adds nothing more to our understanding of a particular outcome than is explained by the identification of risk factors alone.

None-the-less, Luthar suggests that both models serve valuable functions in resilience research, and are simply asking different questions. She states that the aim of the main effects model is to highlight, amongst high-risk individuals, which factors distinguish the resilient from the non-resilient. The aim of the interaction model, as Luthar sees it, is to ascertain which factors moderate specific effects of risk. She argues that both approaches contribute to the overall understanding of resilience and that without either one the picture would be incomplete.

Luthar goes on to describe an alternative approach to the definition of the protective factor within the literature. This would involve adopting a definitional system in which all processes that result in a positive effect are called 'protective'. This could be established by the identification of factors associated with a positive outcome, either via their interaction with risk factors or via a main effect. However a distinction would be made according to the exact effect that occurs in the presence or absence of risk.

Figure 4.3 below represents three possible interaction effect models that Luthar has identified, as well as the main effect model. (This last model is the same as that depicted in figure 4.2 but has been reproduced here for ease of reference). The justification she gives for their inclusion as models of protection is that for all of them, individuals at high risk who possess this 'protective' variable fare better than high risk individuals who do not. Luthar also suggests a specific nomenclature to describe the various interactive models, recognising that there is more than one possible mechanism within a moderating effect.

Figures 4.3A and 4.3B represent interaction models that correspond to a Rutterian definition of an interactive process, i.e. the protective factor has a significant effect in the presence of high risk but not in the presence of low risk. Luthar names these
‘protective stabilising’ (fig. 4.3A) and ‘protective enhancing’ (fig. 4.3B), these titles being given on the basis of their respective effects on outcome (in this case ‘competence’). The protective stabilising effect involves the competence of the individual being maintained in the presence of high risk to a similar level as in the presence of low risk. The protective enhancing effect involves an improvement in the individual’s level of competence in the presence of risk as compared to in its absence.

Figure 4.3C also represents an interaction effect, but this time the protective factor has its greatest impact under low risk conditions, and is termed ‘protective reactive’. The final figure (fig. 4.3D) represents ‘protective effects’ in which there is a similar effect on competence under conditions of high and low risk. This is typically known as the ‘main effects’ model.

Luthar maintains that all of these effects could reasonably be described as ‘protective’ as under conditions of high risk, individuals for whom the attribute is present function better than those for whom it is absent. In addition, this approach highlights the fact that protective factors can operate via many possible mechanisms depending on the nature of their interaction with risk, as illustrated in models A to C (figs. 4.3A-C).

However, the inclusion of the main effects model (fig. 4.3D) within this approach appears to represent an anomaly. As well as the problem of conceptual redundancy stated above (see Section 4.2.2.2) this model does not give any indication of the mechanism that resulted in the positive outcome. If a factor has a positive effect both in the presence and absence of certain risk factors (i.e. a main effect), it is likely that this factor operates via a broad, non-specific process. It would be what Rutter (1985) referred to as a “positive experience”, a factor that “generally predisposes to an adaptive outcome” (p.600). If, on the other hand, a factor only has a positive effect when a particular risk factor is also present (i.e. an interaction effect), this would suggest that the mechanism by which the factor operates specifically involves this risk factor in some way. This illustrates how the interaction model of protection is more effective in identifying protective processes than the main effects model.
Figure 4.3 Luthar's (1993) suggested models of protection including both interactions (A-C) and a main effect (D).

A: Protective-stabilising effect

B: Protective-enhancing effect

C: Protective-reactive effect

D: Protective (main) effect
Although there is considerable disagreement about the description of compensatory factors as protective, there does appear to be some merit in Luthar’s suggested approach. By identifying the nature of the interaction between the risk and protective factors, as illustrated by models A to C, researchers may be able to appreciate more precisely the protective process that may have occurred. The importance of this is described in the following section.

4.2.3 Protective processes

Rutter (1985; 1987) wrote much of the seminal work defining terms using the interaction effect model. There are two additional points not yet made that should be highlighted.

The first point is that having carefully defined the term ‘protective factor’, it is in fact far more important to consider the underlying interactive processes or mechanisms by which they have their effect. The identification of one or more protective factors, although perhaps representing the first stage of an investigation, tells the researcher very little. The real interest is in establishing how these factors operate.

The significance of exploring protective or interactive processes is highlighted by the fact that the same variable can be considered to be a protective factor in one process but a risk factor in another (Rutter, 1987). It is not the variable itself that determines how it will function with respect to other variables but the process within which it operates.

This is emphasised and illustrated by the second point. It is not some intrinsic, positive characteristic about a variable that results in its classification as a protective factor. Often they are not what one might categorise as ‘good’ in any sense. Rutter (1985) cites examples from animal studies (Hennesy & Levine, 1979; Hunt, 1979), in which exposure to physical stresses in early life affects the neuroendocrine system such that resistance is enhanced to similar exposures later on. This ‘steeling’ effect can also be
seen in humans, where individuals undergoing their first parachute jump experience an initial hormone response equivalent to that of an acute stress reaction. No such stress exists for experienced jumpers (Ursin, Baade & Levine, 1978). There are other examples such as the effect of sickle cell anaemia, which, although in itself represents a debilitating disease, is actually protective against the outcome of malaria (Rutter, 1987).

4.2.4 Summary

The purpose of this section on key definitions has been to highlight the main issues within the resilience literature in order to inform the interpretations that can be made from the available findings. It is apparent that there has been inconsistency in the definitions used for key terms within this area of research. An individual’s ‘resilience’ to high risk has been assessed according to a number of outcomes, most often involving some measure of their ‘competence’. However this concept is not measured in any standard way, resulting in findings that are not generalisable. In addition, the fact that such outcomes vary over time is seldom taken account of in study designs.

There also appear to be two differing approaches to the definition of the ‘protective factor’. The ‘main effect’ model includes variables that have a direct or main effect on the outcome variable whilst the ‘interaction effect’ model restricts the definition to variables that have an identifiable interaction with risk (i.e. variables that moderate the effect of risk on outcome). It has been argued that only the interaction effect model adds to our understanding of how certain outcomes occur beyond what is already accounted for by the identification of risk factors. In addition, the interaction effect model of protection facilitates our understanding of protective processes. From this point forward, the term “protective factors” will only be used to refer to variables that interact statistically with risk. Variables that simply correlate with a resilient outcome, however defined, will be known as “compensatory factors”.

The need for longitudinal studies using standard terms, investigating resilience in high-risk subjects, which is assessed using a range of outcomes, is therefore highlighted. Finally, research should not only be focused on establishing protective factors that
result in positive, or 'better than expected' outcomes, but on identifying the mechanisms or protective processes that give rise to these outcomes.

In the light of this discussion, therefore, it is appropriate to consider the main findings from the resilience literature. A limited number of studies have attempted to identify protective factors specifically in the context of childhood sexual abuse, against a range of adverse outcomes. These studies will be reviewed first before drawing on research from the wider literature that may have relevance to the research question in this thesis, including other maltreatment and non-maltreatment related work.

4.3 Evidence for the action of protective factors

4.3.1 Protective factors in sexual abuse research

It appears that the majority of studies involving subjects who were childhood victims of sexual abuse have been conducted to assess the negative long-term effects of this form of maltreatment. The number of studies examined in the four meta-analyses (e.g. Jumper, 1995; Rind, Tromovitch & Bauserman, 1998) reviewed earlier (see Section 1.3.3.6.1) provides evidence suggestive of this. However, there are a small number of studies that have attempted to establish the factors that play some role in the protection of such subjects against the effects of sexual abuse, and hence the avoidance of a particular negative outcome (e.g. Black, Dubowitz & Harrington, 1994; Lam & Grossman, 1997).

Only two studies (Borowsky, Hogan & Ireland, 1997; Gilgun, 1991) have been found that explicitly investigate which factors might help to prevent the development of sexually abusive behaviour in sexually victimised individuals. These will be described and analysed in detail in the first sub-section (Section 4.3.1.1).

The remainder have looked for factors that protect against maltreatment effects to produce other types of 'resilient' outcome, resilience being defined in a number of different ways in these studies. Only two studies have been found that successfully established a statistical interaction between risk and protection (Black, Dubowitz &
Harrington, 1994; Lam & Grossman, 1997). These will be described in the second sub-section (Section 4.3.1.2).

Seven studies have been found that employed methodologies allowing them merely to highlight compensatory factors (e.g. Chandy, Blum & Resnick, 1996; Lynskey & Fergusson, 1997; Spacarrelli & Kim, 1995). That is to say, they adopted the ‘main effect’ model of protection. Although it should be clear from the early part of this chapter that the interaction model is preferred in identifying protective factors (see Section 4.2.4), studies employing the main effect model will be reviewed here, as they represent the current state of the protection literature. However, a less detailed summary will be given of the findings of these seven studies in Section 4.3.1.3.

### 4.3.1.1 Protection against perpetrating behaviour

As has been stated in the introduction to this section, two studies have been found that investigated the factors hypothesised to play a protective role in averting the development of sexually abusive behaviour in former victims of such abuse (Borowsky et al., 1997; Gilgun, 1991). Both of these involved retrospective recall of potentially protective features of the subjects’ lives and a subsequent comparison of the experiences of individuals who went on to sexually offend with those of individuals who did not.

The first was an interview study of 48 subjects (36 men and 12 women) who were selected according to the principles of theoretical sampling (Glaser & Strauss, 1967). In this method, selections are made on the basis of whether the individual’s characteristics would challenge or add to current understanding (Gilgun, 1991). Almost half the subjects (23/48) were sampled from prisons, the others from Sex Addicts Anonymous (11) and community treatment programmes (14).

All the subjects had been maltreated in various ways as children including sexual, physical, and emotional abuse, and neglect. Maltreatment was conceptualised in this study as being a ‘vulnerability factor’ that would place the victim at risk of perpetrating acts of sexual and physical violence. The likelihood of this occurring was thought to be reduced by the presence of protective mechanisms, which would be in
dynamic interaction with the vulnerability factors, and the subject’s perception of stress. In this sample, 15 of the male subjects had already gone on to sexually offend against children, eight had committed rape, and one had done both.

The purpose of the interview was to explore various aspects of the subjects’ lives including their family history, friendships, their experience of family discipline, their experience of abuse and neglect, sex education and their own sexual behaviour. Certain developmental patterns were then identified that appeared to differentiate the individuals who had gone on to sexually offend from those who had not. The main reported finding was that many subjects who had a conviction for child molesting had been unable to confide in anyone about their painful feelings. However the non-criminals, although sometimes going many years without confiding in anyone, did eventually create a strong enough relationship to enable such confiding to be done.

The author was very careful to state that these findings were only suggestive and indeed studies with such an exploratory approach are necessary to identify factors that warrant subsequent investigation with greater methodological rigour. However, it is questionable whether any conclusions can be drawn from this study as there are at least four major areas in which problems exist. These relate to the following: the absence of appropriate statistical analysis; the misuse of terms; apparent contradictions between the results and the conclusions; and further methodological problems.

First, although there were several references to protective factors that might prevent abused individuals from developing an abusive orientation, no attempt was made to establish a statistical interaction with any risk factors, nor even an association with the outcome. In fact no statistics were reported at all other than descriptions, using loose terminology, of the subjects with or without these so-called ‘protective’ factors. For example, non-criminals were described as ‘tending to confide in others’. No breakdown was given of how many did and did not confide. Thus it was not even possible to state that having a confiding relationship correlated with a non-abusive outcome.
This misuse of the term 'protective factor' was not the only example of imprecise language in this study. Although the conceptualisation of child maltreatment and protection was clearly stated, the way these phrases were used betrayed an apparent lack of understanding of the terms. Vulnerability factors are variables that interact with risk factors to make an adverse outcome more likely (Rutter, 1985). To conceive of maltreatment as a vulnerability factor for violent or sexual offending seems bizarre as it would imply that there is an interaction with further risk factors that have a main effect on this outcome. However no suggestions are made about what these factors might be.

In addition, protective mechanisms involve the interaction of protective factors with risk factors to reduce the likelihood of an adverse outcome (Rutter, 1985; 1987). It is not at all clear what is meant by a 'dynamic interaction between vulnerability factors and protective mechanisms'. Finally, no attempt was made to establish the veracity of this approach. This makes a valid interpretation of the findings more difficult.

Confidence in the results is further discouraged by an apparent contradiction between the results and the main stated conclusion. Confiding in others was supposed to be the main factor that differentiated perpetrators from non-perpetrators, with perpetrators being much less likely to confide. However it was also stated that none of the non-perpetrators who had been sexually victimised had confided in others about this form of abuse. Given the fact that the development of sexually abusive behaviour is the main outcome under investigation, it is surprising that this contradiction was not at least commented on by the author.

Finally, there are three further methodological problems with this study. The first two relate to the nature of the sample. First, it seems rather too small to identify protective factors of interest especially as it was a mixed sample and males and females were (appropriately) analysed separately. Second, it was self-selected. Although it is appropriate to choose the population from which a sample is drawn, the fact that the subjects select themselves introduces a bias with respect to the sorts of factors that might be identified as being protective.
Finally, no confounding variables were identified that might more significantly account for the differences between the two groups. For example, the non-perpetrators may simply have been subjected to greater amounts of therapeutic intervention, whilst the perpetrators might have been victims of more severe forms of abuse. No attempt was made to control for such possibilities.

Despite these methodological and conceptual problems, the main finding that was identified does at least make logical sense. That is, having a confiding relationship may serve a protective role in preventing victims of abuse from becoming perpetrators. For example, being able to talk about the abusive events might prevent victims of abuse from adopting those cognitive distortions that are thought to facilitate the development of this behaviour (see Section 2.3.4). The question of how some victims develop the capacity to form intimate relationships whilst others do not should also be considered, however.

The second study that has addressed the issue of protection in relation to the development of sexually abusive behaviour was part of a community study conducted in 1992 on 71,594 students called the Minnesota Student Survey (Borowsky et al., 1997). The subjects, who were school children of both genders aged 11, 14 and 17 years, were asked questions which fell into 9 categories: demographic characteristics; family substance use; family violence; sexual abuse; personal substance use; emotional status (e.g. self esteem); caring and connectedness (e.g. feelings about family interactions); academic performance; and activities (e.g. time spent in gangs). In addition, they were asked if they had ever forced someone into a sexual act with them, which represented the dependent variable. Subjects who responded 'yes' were considered 'perpetrators' whilst those who had answered 'no' were 'non-perpetrators'. Questions were asked using a self-report questionnaire format. All analyses were conducted separately for males and females.

The perpetrators' experience of putative risk and protective factors was compared with that of the non-perpetrators in order to identify factors that differentiated one group from the other. Then all factors were simultaneously entered into a logistic
regression to ascertain the effect of each factor on the dichotomous outcome having controlled for all the others.

With regard to compensatory factors, the results suggested that males who have good 'emotional health' (OR = 0.43; 95% CI = 0.28-0.66) and who are well 'connected with the community' (OR = 0.53; 95% CI = 0.38-0.75) are less likely to perpetrate sexual violence. However it must be reiterated that the authors were only able to identify factors that correlated with a favourable outcome, i.e. subjects not perpetrating sexual violence. This constitutes not a protective factor but a compensatory variable.

Again, little can be said in terms of conclusions from this study. There was no attempt made to establish the temporal order of the maltreatment the subjects experienced and the sexual violence they perpetrated. It was simply asked whether the subjects had ever perpetrated such an offence, and this could conceivably have predated their own victimisation. As such, it cannot be concluded whether the maltreatment is a risk factor for abusive behaviour or vice versa. This creates a problem when attempting to identify protective factors.

Furthermore, it is questionable whether an appropriate definition of perpetrators of sexual violence was used in this study. Subjects were classified as perpetrators if they had simply used 'verbal coercion' to encourage their 'victim' into a sexual act. It is not stated what proportion of the perpetrators were classified under this criteria but the generalisability of findings from such a group may be limited.

Summary
Only two studies have been conducted that have addressed the question of protection against the development of sexually abusive behaviour in sexually abused individuals. Having a confiding relationship, good emotional health and being connected to the community were stated as reducing their likelihood of subsequently sexually offending. However, neither study attempted to establish interactions between risk and protection, and confidence in the results of both studies is compromised by methodological problems with their designs.
4.3.1.2 Sexual abuse studies employing the interaction model of protection

Two studies were found that successfully identified interactions between risk factors involving sexual abuse, and certain protective factors, with resultant positive effects on various behavioural outcomes (Black, Dubowitz & Harrington, 1994; Lam & Grossman, 1997). These will be described and analysed below.

Lam and Grossman (1997) investigated the buffering properties of a composite index of 16 factors that they believed might be protective against some of the adverse consequences of sexual abuse. They tested three hypotheses in their study of 264 female undergraduate students, 48 of whom had self-reported childhood experiences of sexual abuse. The first hypothesis was that a high level of protective factors would be associated with higher levels of adaptation for all students irrespective of their maltreatment status. If this hypothesis was upheld, it would suggest that a high number of these protective factors in combination may serve some generalised positive effect, referred to above as a main effect, on a mixed population of maltreated and non-maltreated undergraduates.

The second hypothesis was that the level of protective factors would be more predictive in terms of adaptive outcome for the maltreated subjects than for the non-maltreated ones. If this was a statistically significant finding it would represent a statistical interaction and hence a moderating effect of the aggregated protective factors on the maltreatment risks with respect to adaptation.

The third hypothesis was that individuals who had suffered a high degree of maltreatment but who also had high levels of protective factors would have similar adaptation scores to non-maltreated individuals. This would provide a good indication of the extent of the buffering that the aggregated protective factors could provide for maltreated subjects.

The sixteen protective factors were drawn from the general resilience literature and were grouped into the three recognised categories of such factors, i.e. individual, familial and social factors (Mrazek & Mrazek 1987). Individual factors included the
subjects’ sense of physical self-efficacy, the five factor personality characteristics (e.g. neuroticism, extroversion), self esteem, planning and internal locus of control. The familial factors measured were the subjects’ attachments to their parents, the quality of their relationships with their parents and the level of support from their family, whilst their attachments to peers and the level of social support experienced were the social factors under examination.

The sixteen protective variables were submitted to a principle components analysis to establish the extent to which they accounted for conceptually different aspects of protection. The results of this analysis identified two main factors, the first comprising thirteen variables that were not distinct from each other, which reflected the personal resources (e.g. self esteem, self-efficacy) and social support available to the subject. The second factor reflected the subject’s relationship with her parents and consisted of two variables. The extent to which a large number of variables were indistinct from each other was cited as support for the use of a protective index, an aggregate score of all the protective factors, which was used to test the interaction between risk and protection.

Subjects were asked about maltreatment in childhood using the Child Abuse and Trauma questionnaire (CAT) which included items on sexual, physical and emotional abuse, as well as neglect and negative home atmosphere. Outcome was established according to the subjects’ current levels of depression (Beck Depression Inventory), their experience of a range of psychological symptoms such as ‘distress’ (Symptom Checklist-90-revised), and a measure of social adjustment with high scores equating to poor adjustment (Social Adjustment scale). All three of these outcome measures involved self-reporting.

In addition, a measure of the subjects’ propensities to give socially acceptable and otherwise favourable answers in preference to truthful ones was given (Marlowe-Crowne Social Desirability Scale; Crowne & Marlowe, 1960). Misleading answers could therefore be statistically controlled for, according to the scores on this scale.
Evidence was found in support of all three hypotheses. By calculating Pearson r correlations it was found that the composite index of protective factors (PI) was significantly negatively associated with all three outcome measures. In other words those individuals, irrespective of their maltreatment status, who had experienced more protective factors had lower levels of depression, lower levels of symptoms and better social adjustment than those who had experienced lower amounts of protection. Further support was given by the results of multiple regressions in which the relationships between the PI and all three outcome measures was significant. A possible conclusion, therefore, is that the aggregate of these 16 factors had a positive main effect on the adjustment of a sample of female undergraduates as indicated by the three outcome measures.

Significant interaction effects were also found between maltreatment status and the PI when all three outcomes were used separately as the dependent variable. This means that the composite index of these factors had moderated the relationship between the experience of maltreatment and the outcomes of depression, symptoms and social adjustment, and had exerted a protective effect on the maltreated subjects. As has been stated above, finding a significant interaction between two variables in a non-experimental field study is particularly difficult to achieve (McClelland & Judd, 1993). This makes a significant interaction all the more noteworthy.

The authors also claimed to have support for the third hypothesis. When sexual abuse status was entered simultaneously with the protective index as independent variables in a regression using each measure of adult adaptation as the dependent variable in turn, no main effect was found for sexual abuse on any of the outcomes. This implies that individuals who were abused and yet had high protective index scores had similar outcome scores to non-abused individuals. This suggests that these protective factors were particularly effective, in some way buffering the victims of maltreatment from its effects on the three outcome variables.

This is not to say, of course, that all deleterious effects of maltreatment are protected against by these factors. Conclusions can only be made about those outcomes that were assessed. In fact, some caution should be applied even when making claims
concerning these outcomes as there are a number of criticisms and comments that could be levelled at this study. Three of these involve issues of methodology whilst the other two relate to the accuracy of the interpretation of the results. These problems are outlined below.

The first methodological issue concerns the possible introduction of error into the results. This may have occurred as a result of the particular measure (the CAT) used to assess the subject’s experience of sexual abuse, which involved an overly generous classification of abuse victims. This measure includes ‘fear of being sexually mistreated by parents’, and ‘traumatic sexual experiences as a child’ as sufficient criteria for classification as abuse victims. The first of these represents an imagined rather than an actual event and such cognitions may have been a consequence of many factors unrelated to an experience of sexual abuse. In addition, the definition of ‘traumatic childhood experiences’ requires clarification. These could conceivably include non-aggressive sexual episodes with peers involving acute embarrassment rather than more serious sexual abuse. The consequences of the former type of trauma could be very different to those of the latter variety.

The second point relates to the statistical procedure adopted in the study. It was not clear why, having performed a principle components analysis which identified two distinct factors, all the factors were then aggregated again in the regression analysis. There may have been some finding of interest, related to the conceptual distinction between these two main protective indices, that was lost as a result of this strategy. An analysis using the two principle components separately may, for example, have elucidated a mechanism that was operating in the protective process.

A third methodological issue is that the outcome measures were only assessed at a single time point and could therefore be unrepresentative of more long term outcomes. Kaufman, Cook, Arny, Jones and Pittinsky (1994) and others have emphasised the need to measure outcome at a number of time points to establish continued adaptive functioning.
With regards to the appropriateness of the interpretations made, the authors state that the association between the PI and the outcome measure of social adjustment implies that the 16 factors in the index had a positive effect on this aspect of adaptation within this sample. However, this association could also be accounted for by overlap in the protective factor measures and the outcome measure, i.e. they could be measuring the same thing and would therefore inevitably correlate. A number of factors in the index appear to simply represent aspects of social adjustment. For example, one such factor measured by the Network Orientation Scale reflects the subjects’ tendency to use their social support networks. This is likely to also reflect these individuals’ social adjustment. The authors do not give details of the association of each of the 16 factors in the index with social adjustment. All that is stated is the overall range of correlations between the index factors and the three outcomes, which is between .00 (maternal bonding and depression) and .67 (neuroticism and symptoms).

It should finally be stated that caution must be employed when making conclusions about causal effects from these findings. As a retrospective study, it is not clear whether the outcomes were a result of the sexual abuse or in fact predated it. Inability to clearly establish the temporal order of events relating to risk, protection or outcome mean that conclusions about cause and mechanism must be left to other, prospective studies.

Only one other study has looked for an interaction effect whilst investigating factors that influence children’s resilience to sexual abuse. Black, Dubowitz and Harrington (1994) analysed the effects of developmental level, as assessed by age at testing, on the behaviour and self perception of two groups of children, one of whom comprised children who had been referred for sexual abuse. The other group was a non abused control sample, matched on age gender and socio-economic background. The medical records of the control group were reviewed to minimise the error which could accrue if one of them had been sexually victimised. The children were recruited from an inner city primary care clinic and were all between four and twelve years of age.

There were two hypotheses under examination: that children suspected of having been sexually abused would exhibit more behavioural problems, as reported by their
parents, than the controls, older children having more problems than the younger ones; that older children in the group suspected of being sexually abused would have lower levels of perceived competence and social acceptance than the younger ones.

The authors found, first of all, that a significantly higher number of children in the group suspected of having been sexually abused had elevated internalising and externalising scores than the comparison group (p<.01). Any differences in behaviour problems between the groups were analysed by means of a MANOVA with group status (abused vs. control) and age at time of testing as independent variables, whilst the dependent variables were the internalising and externalising sub-scales of the CBCL (Achenbach & Edelbrock, 1983). The subjects were divided by median split into ‘older’ (M = 8.9 years, s.d. = 1.6) or ‘younger’ (M = 5.2 years, s.d. = 1.1). Main effects were found for group status (p<.02) and age (p<.05) but there was no significant interaction effect of group by age. This implies that age does not moderate the effect of sexual abuse on behaviour problems as assessed using the CBCL.

In attempting to investigate the second hypothesis, the authors performed another MANOVA again using group and age as independent variables. The children’s perception of cognitive competence and social acceptance were the outcome variables and were measured using two standardised scales, depending on the age of the child. For the four to seven year olds the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter & Pike, 1984) was used, whilst for the older children the Self-Perception Profile (Harter, 1982) was used. No main effect was found for group status but a significant effect was demonstrated for age (p<.001), with the younger children having better scores.

In addition, a significant group by age interaction effect was found. In the ‘abused’ group, younger children had a significantly better self perception on both sub-scales than the older children whilst no such age difference existed for the non-abused group. According to the authors, this would imply that age moderates the relationship between the experience of sexual abuse and self perception in children. They suggested that the abuse would have a different meaning to children depending on their age. Older children might attempt to rationalise the abuse by attributing it to
some internal cause whilst younger children, with their limited knowledge and understanding of the abuse situation would be more likely to avoid the negative long term effects.

However, there are two main points to make about this study that minimise the conclusions that can be drawn from it. The first problem lies in the use of 'age at the time of testing' as one of the independent variables, rather than 'age at the time of the abuse'. It is not clear for how long the abuse has occurred, and therefore any differences in outcome cannot simply be attributed to the developmental level of the children. The older children may have been victims of abuse for several years prior to testing and this may have been the reason why their outcomes were worse than for the younger ones, rather than some aspect of their developmental level. Similarly, the younger children may not have displayed such negative effects simply because the duration of their abuse had not been so long or because it takes time for the effects to become apparent.

The second problem lies in the fact that for many of the subjects, their experience of sexual abuse was never actually established for certain, and for others the clinicians found no abnormal findings during the course of their examination. They therefore cannot be described as a representative group of sexually abused children.

Thus, all one can say from this study is that amongst children suspected of having been sexually abused, those that are tested at an older age are more likely to have lower self perceptions than those tested when younger. This is not particularly helpful in terms of establishing factors associated with resilience to the effects of sexual abuse, which was the stated aim of the study.

Summary

Two studies have successfully identified protective factors against certain adverse psychological outcomes in sexually abused subjects (Black, Dubowitz & Harrington, 1994; Lam & Grossman, 1997). In the first (Lam & Grossman, 1997), when combined together in an index, factors relating to the subjects’ personal resources (e.g. self efficacy) and others reflecting their relationships with their parents were
found to be protective against depression, poor social adjustment and a range of other psychological symptoms. In the second study (Black, Dubowitz & Harrington, 1994), the subjects' age at the time of testing was found to interact with self-perception, with younger children having a significantly better outcome than older children.

In the next section, a number of further studies will be reviewed that attempted to find compensatory factors for individuals who had been sexually abused.

### 4.3.1.3 Studies identifying compensatory factors

Seven studies were found within the resilience literature that had attempted to identify factors that correlated with a resilient outcome in subjects who had been sexually abused in childhood (e.g. Himelein & McElrath, 1996; Lynskey & Fergusson, 1997). Although such compensatory factors cannot be described as protective factors, they may provide clues as to which variables to collect data on in subsequent research on protection. For this reason these studies are reviewed in brief below.

A brief summary of the compensatory factors identified by their correlation with a resilient outcome is given below, followed by a critique of some of the methods employed in these studies. Table 4.1 provides a summary of the nature of the samples investigated, the definitions of resilience employed and the main compensatory variables identified by the various studies.

#### 4.3.1.3.1 Compensatory factors identified

The compensatory factors identified from the studies with either female or mixed samples can be grouped in the following ways. A number relate to the subject's self-perception and include perceiving oneself as being healthier than others, as being religious or spiritual (both from Chandy, Blum & Resnick, 1996a) and having an internal attributional style (Liem et al., 1997) or a perception of internal control (Himelein & McElrath, 1996). This final factor may be indicative of self-belief which resilient individuals might apply to their abuse experience and thereby achieve some mastery over the more negative effects.
The quality of the subjects' relationships with others may also have a protective effect, with paternal care score (Lynskey & Fergusson, 1997), parental support (Spaccarelli & Kim, 1995), a good social life, and satisfaction with one's partner (Romans et al., 1995) all having an association with the specified resilient outcome.

Other factors, identified as compensatory, which may warrant further investigation as potential protective factors, include measures of the subjects' school and sporting achievements as well as being in paid work as an adult (Romans et al., 1995). Finally being under 10 years old at the time of the abuse appears to correlate with a resilient outcome as does having a large number of siblings (Liem et al., 1997; Lynskey & Fergusson, 1997). No additional information was available to allow a mechanism to be identified to indicate why having more siblings might correlate with a positive outcome.

The factors specific to a male sample that were identified as correlating with resilience broadly fitted with the findings for females. The factors were: 'the belief that one's parents care' and the 'educational level of one's mother' (Chandy, Blum & Resnick, 1996b).

4.3.1.3.2 Critique of studies identifying compensatory factors

A number of points about these studies should be mentioned when considering what can be concluded from them. These relate to the appropriateness of the study designs, the samples investigated, the multiple definitions of resilience employed, the variability of resilience over time, the appropriateness of the data gathering method and the limitations in the factors that have been analysed. Each will be described in turn.

First of all, with respect to the study designs which are cross sectional and retrospective in nature, particular problems are associated with this approach. The ability of former victims to accurately recall salient aspects of their sexual abuse is affected by the interpretation they made of it at the time and in subsequent years (Romans et al., 1995). This can result in selective recall or exaggeration of childhood trauma (Gerlsma, Emmelkamp & Arrindal, 1990; Lewinsohn & Rosenbaum, 1987).
Table 4.1 Studies that identify compensatory factors for victims of sexual abuse (continued overleaf)

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Description of Sample</th>
<th>Outcome Variables</th>
<th>Criteria for resilience</th>
<th>Compensatory factors identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandy, J., Blum, R. &amp;</td>
<td>Community sample of</td>
<td>School performance, suicidal</td>
<td>&gt;ave. school grades and</td>
<td>Perceives self as healthier than others, as</td>
</tr>
<tr>
<td>Resnick, M. (1996a)</td>
<td>2,022 female teenagers,</td>
<td>ideation/behaviour, disordered eating, sexual behaviour and pregnancy risk, minimal alcohol/tobacco use</td>
<td>none of the rest except</td>
<td>religious/spiritual, perceives adults care about her, nurse at school, lives with biological parents (p=&lt;.0002 for all variables)</td>
</tr>
<tr>
<td></td>
<td>50% victims of sexual</td>
<td>substance use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>abuse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lynskey &amp; Fergusson</td>
<td>Community sample of</td>
<td>Major depression, anxiety/conduct disorder, alcohol/substance abuse, suicide attempt, 3+ on Post Sexual Abuse Trauma checklist.</td>
<td>Resilience scale:</td>
<td>% aged &lt; 10 at time of abuse (p=&lt;.05), mean paternal care score (p&lt;.05)</td>
</tr>
<tr>
<td>(1997)</td>
<td>1,025 mixed sex, 107 of whom were victims of sexual abuse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chandy, J., Blum, R. &amp;</td>
<td>Community sample of</td>
<td>School performance, suicidal</td>
<td>&gt;ave. school grades and no sign of the other outcomes except minimal alc/tob. use</td>
<td>education level of mother (p=&lt;.004), belief that parents care (p=&lt;.004)</td>
</tr>
<tr>
<td>Spaccarelli, S. &amp; Kim, S.</td>
<td>Clinical sample of 43</td>
<td>Anxiety and depression, OR social competence</td>
<td>Absence of clinical levels of symptomatology, OR social comp. score &gt;= norm</td>
<td>Parent support (p&lt;.05), total abuse stress (p&lt;.05)</td>
</tr>
</tbody>
</table>
Table 4.1... continued. Studies that identify compensatory factors for victims of sexual abuse

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Description of Sample</th>
<th>Outcome Variables</th>
<th>Criteria for resilience</th>
<th>Compensatory factors identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romans, S., Martin, J., Anderson, J., O'Shea, M. &amp; Mullen, P. (1995)</td>
<td>Community sample of 138 sexually abused women, 182 controls</td>
<td>Present State Examination 'caseness', self esteem</td>
<td>1+2: enjoyed high school (p&lt;.05), good social life (p&lt;.001), good at sport (p&lt;.01), affectionate parental reln. (p&lt;.05), satisfied with partner (p&lt;.001); 1 only: lives with partner (p&lt;.01) 2 only: got on easily with boys (p&lt;.001), academic success (p&lt;.05), partner is confidant (p&lt;.001), paid employment (p&lt;.001)</td>
<td></td>
</tr>
<tr>
<td>Himelein, M. &amp; McElrath, J. (1996)</td>
<td>College sample of 20 female victims of child sexual abuse</td>
<td>'Adjustment index' calculated from measures of affective well being, life satisfaction, anxiety and depression.</td>
<td>Adjustment index scores above the sample mean</td>
<td>Disclosed and discussed CSA, minimised impact of CSA, positive reframing of events, refusal to dwell on experience. (Qualitative analysis)</td>
</tr>
<tr>
<td>Liem, J., James, J., O'Toole, B. &amp; Boudewyn, M. (1997)</td>
<td>Mixed college sample of 145 child sexual abuse victims</td>
<td>Depression, self esteem.</td>
<td>No depression AND self esteem score &gt; sample mean.</td>
<td>Having a large number of siblings (p&lt;.05), internal attributional style (p&lt;.05), few stressful life experiences (p&lt;.05).</td>
</tr>
</tbody>
</table>
More recent experiences of symptoms such as depression can also result in negative distortions or perceptions of reality that correspond to this mood (Beck, Rush, Shaw & Emery, 1979). Thus the presented findings should be used to guide future research into factors that moderate the effects of sexual abuse, rather than as reliable evidence of compensatory factors.

In addition, retrospective research does not allow an accurate positioning of events in the correct temporal order. Thus it would not be clear if certain factors, shown to be compensatory, predated the abuse or came about in response to it. This renders conclusions about protective mechanisms impossible to arrive at. For factors that do represent a compensatory response to the maltreatment, the question also arises of what enabled this response to occur (Heller, Larrieu, D’Imperio & Boris, 1999). What predating factor was present that facilitated the person to act in the positive way that they did? Thus, highlighting one compensatory factor invariably uncovers further questions.

Another general problem relates to the make up of the samples employed in some research. For example, some studies recruit their samples from a clinical environment. These are unlikely to be representative of the general population of abused individuals. This also applies to college samples which may exaggerate the proportion of individuals who, given their success in attending college, are likely to represent a more resilient sample of the general population to the effects of maltreatment.

A related problem concerns samples of mixed gender. It is highly probable that the mechanisms leading from childhood maltreatment to psychopathology are different for males and females. This is particularly likely with respect to the development of sexually abusive behaviour. Therefore factors identified as being compensatory (or protective) against this outcome are also likely to be different for males than for females. However, given that relatively little research has been conducted on this subject it is necessary to draw on nearly all of the work that has been done. Particular care must be taken in the conclusions that are made with respect to males from studies
that employed either mixed or female samples. In future research, it is important that
groups of males and females are analysed separately.

Many different definitions for the term 'resilient' were used in these studies, a
common problem within the resilience literature as highlighted in the introductory
section to this chapter. Resilience tended to be defined in terms of a range of
measures of mental health but each study used a different combination of these
measures (see Table 4.1). For example, one study defined resilience as having scores
for depression and self esteem above the sample mean (Liem et al., 1997), whilst
another included depression with other factors such as anxiety, measures of affective
well being and life satisfaction, to calculate an 'adjustment index' (Himelein &
McElrath, 1996). A resilient individual in this study required an adjustment score of
above the sample mean. These differences mean that care must be taken when
comparing the results from these studies.

A further point, also made earlier with reference to other studies, is that resilience can
alter over time. Studies in which assessments are made at only one time point must
therefore be interpreted with caution. The need for longitudinal follow-ups has often
been stated (Herrenkohl, Herrenkohl & Egolf, 1994; Spaccarelli & Kim, 1995).

Two further problems were identified concerning the results of the studies under
review. The first relates to the use of self-report measures. Poor agreement was
revealed between self report and parental report with respect to resilience as defined
by measures of anxiety and depression (Spaccarelli & Kim, 1995). This calls into
question the validity of the classification of resilience in many of the studies as they
employ only self-report measures as the source of data from which this classification
is made. This also implies that not only multiple measures should be used to define the
resilient sub-group, but other individuals as well as the subject should be used as
sources of data.

Finally, no indication is given in Table 4.1 of the strength of the relationship between
the resilient outcome (in whatever way this is defined) and the 'compensatory factors'
identified. A number of studies report quite weak relationships (e.g. Spaccarelli &
Kim, 1995). A limited amount of variance being accounted for with respect to the outcome leads to models which do not predict outcome very accurately. In such situations, other factors that were not measured must be responsible for the resilience of some subjects. Possibilities for other factors include internal variables, e.g. personality characteristics, a genetic component, or other external factors that were not measured, e.g. presence of supportive peer relationships. These should ideally be measured and analysed in subsequent research.

4.3.1.3.3 Summary
A number of factors have been identified that correlate with a range of positive outcomes for individuals who have been sexually abused in childhood. These include factors that relate to these individuals’ positive self-perception and to the quality of their relationships with significant others.

These findings may be of help to future researchers, who are attempting to identify protective factors against some of the adverse outcomes of sexual abuse (e.g. the development of sexually abusive behaviour), in making decisions about which factors to investigate. However, the fact that a particular factor correlates with a particular positive outcome by no means implies that the same factor will interact with risk to increase the likelihood of that same outcome.

In addition, it should be noted that the majority of studies that have attempted to identify protective factors were retrospective in design. This methodology makes the reliable identification of risk factors problematic, as establishing the accurate temporal order of events between the risk and the outcome is very difficult to achieve retrospectively. It is possible that a risk factor for a particular outcome, identified in such a study, may in reality have occurred in time after the adverse outcome. The incorrect identification of risk factors in this way would mean that no weight could be attached to any findings about protective factors. This is because the identification of protective factors is so closely tied to the correct identification of risk factors.
In the next and final section of this review, a number of further factors are outlined that may also be worthy of future investigation as protective factors. These have been identified from the broader resilience literature.

4.3.2 Other possible protective factors from the study of resilience

Several studies have been conducted looking for protective factors in the lives of individuals who were maltreated in childhood (e.g. Cicchetti, Rogosch, Lynch & Holt, 1993; Herrenkohl, Herrenkohl & Egolf, 1994). These studies typically included victims of sexual abuse, but also victims of physical abuse, emotional abuse and neglect who had not been sexually abused. Two of these studies identified protective factors against the particular outcomes they were investigating (Cicchetti & Rogosch, 1997; Moran & Eckenrode, 1992).

In the first of these studies, Cicchetti and Rogosch (1997) assessed 213 children (boys and girls) who had been victims of maltreatment, rating them on an index of adaptive functioning. This index comprised a number of measures of different aspects of interpersonal behaviour, peer relations, psychopathology and risk for school difficulties. A significant interaction was found between maltreatment and the ‘desire for closeness to mother’ ($\beta = .32, p < .04$), such that for maltreated children, the need for greater closeness was related to lower adaptive functioning. A further interaction approaching significance was found between maltreatment and ‘self-esteem’ ($\beta = .41, p < .08$) with self esteem predicting adaptive functioning better for maltreated children ($\beta = .39, p < .0001$) than it did for the control group ($\beta = .32, p < .004$).

In the second of these studies, Moran and Eckenrode (1992) compared a group of 33 maltreated females with 112 non-maltreated female controls, to establish whether there was an interaction effect between two hypothesised protective factors (high self esteem and an internal locus of control) and the outcome variable (depression). Having controlled for parental SES, education and the subject’s age, it was found that both self esteem and locus of control for good events interacted significantly with depression. Further analysis of the direction of these interactions indicated that these
factors were protecting the maltreated adolescent female subjects from becoming depressed.

Other compensatory factors that have been identified, and which might have some relevance for the subject of this thesis, are discussed below. They are grouped according to Garmezy’s (1985) categories of protective factors: the dispositional attributes of the individual; familial cohesion and warmth, and the availability and use of external support systems.

4.3.2.1 Individual attributes

Cicchetti et al. (1993) identified three variables as compensatory factors in their study of 206 maltreated and non-maltreated boys and girls. Ego-resiliency, ego-control and self-esteem all predicted differences in competence, as measured by a composite index of adaptive functioning, which included measures of social adjustment, risk for school difficulty and psychopathology. Ego resiliency was the most powerful predictor. Intelligence approached significance in its ability to predict a competent outcome, and together these variables accounted for 52% of the variance in adaptive functioning.

In addition, although no statistically significant interactions were found between these variables, a backwards elimination procedure was used to establish the best predictors of adaptive functioning. From this, evidence was found that ‘ego over-control’ predicted a competent outcome for maltreated children but not for non-maltreated ones. This characteristic is present in individuals who are reflective, persistent, attentive, calm, dependable, who plan and who respond to reason. This compares with the emotionally expressive, assertive, vital and open characteristics of ego under-controls.

Cicchetti and his colleagues suggested that maltreated individuals who adopt a more reserved, objective and rational way of interacting may consequently be more aware of the most adaptive strategy to take in their maltreating family environment.
Other individual attributes that have been identified as compensatory factors include intellectual ability (Garmezy et al., 1984; Widom, 1991), interpersonal skills (Masten, 1986), and planning abilities (Rutter & Quinton, 1984).

### 4.3.2.2 Familial factors

It has been found that a good relationship with at least one parental figure can protect against the risks associated with child abuse (Hunter & Kilstrom, 1979) and family discord (Rutter 1979). Werner and Smith (1982) also identified a number of family-related factors in their Hawaiian longitudinal study. For example, they found that the presence of alternative caregivers in the house predicted resilience in children. Resilience was also more likely for boys if their father was present and for girls, if their mother was in long-term employment.

Other familial factors that have been shown to serve a compensatory function include the presence of a supportive spouse for adult women, which predicts better quality of their parenting (Rutter & Quinton, 1984) and the presence of intimate relationships (Brown & Harris, 1978).

### 4.3.2.3 External support systems

Research has found that young people who, despite being exposed to high risk, remain resilient to its effects, tend to be both skillful at choosing and then frequent in their contact with a network of informal support figures (Pines, 1979 cited in Luthar & Zigler, 1991; Werner & Smith, 1982). Examples of such figures include same age friends, older friends, teachers and ministers.

A study by Rutter and Quinton (1984) showed that positive experiences at school, either academic or non-academic, were related to levels of planning for work and marriage in women who had been formerly institutionalised, but not for the control group. This same study had also shown that such planning was associated with positive outcomes in these women who had been institutionalised in childhood. Finally, Hunter and Kilstrom (1979) found that for parents, having social supports was one of the significant factors that distinguished those who repeated an intergenerational pattern of child abuse from those who did not.
4.3.3 Chapter Summary

A large number of studies have been reviewed from the resilience literature that have attempted to identify factors that might play a protective role in the lives of individuals otherwise at risk of adverse psychological outcomes. Only two studies have been conducted that have addressed the issue of whether certain variables might reduce the likelihood of the development of sexual perpetration in individuals who have been exposed to risk factors for this behaviour (Borowsky et al., 1997; Gilgun, 1991). They highlighted the importance of confiding in others, good emotional health and a ‘connectedness to the community’. However, as a consequence of several methodological shortcomings, little can be concluded with confidence from these two studies.

A very small number of protective factors have been identified in former victims of sexual abuse against certain other psychopathological outcomes. For example, an index of factors reflecting personal resources and the subjects’ relationships with their parents was found to be protective against a range of such outcomes (Lam & Grossman, 1997). It is obviously of interest to know that these factors protect against some of the effects of sexual abuse, although this does not at all imply that they make sexually abusive behaviour in males less likely. Indeed, one of the studies involved samples of females and the other involved children.

However, other protective factors have been established that mitigate the effects of different forms of maltreatment, i.e. sexual abuse and/or physical abuse and/or neglect (Cicchetti & Rogosch, 1997; Moran & Eckenrode, 1992). In addition, several studies (e.g. Rutter & Quinton, 1984; Werner & Smith, 1982) have identified compensatory factors in samples of sexually abused and otherwise maltreated children. The retrospective design of most of these studies means that conclusions about their outcomes can only be tentative. However both groups of factors may indicate the sorts of variables that could be investigated in future research attempting to identify protective factors against the effects of sexual abuse.
It is not possible at this stage to make any conclusions about which variables represent protective factors against the development of sexually abusive behaviour. There is clearly a need for investigators, first of all, to adopt standard definitions for the terms that are used and then to conduct methodologically rigorous research that is appropriate for the definitions employed. Given that, in this thesis, the approach originally adopted by Garmezy et al. (1984) in defining protective factors is considered to be the most meaningful, it would be necessary to demonstrate that exposure to these factors reduces the likelihood that individuals, who are otherwise at high risk, actually develop into sexual perpetrators. This could be done by establishing a statistically significant interaction between risk and protective factors.

The aim of this thesis, therefore, is to investigate whether a number of variables do in fact act as protective factors against the development of sexually abusive behaviour in male victims of childhood sexual abuse. Methodological considerations that have informed the achievement of this aim are discussed in the following chapter.
Chapter Five Methodological Considerations

5.1 Introduction

There are a number of matters to consider in achieving the aim of this thesis, which is the identification of protective factors against the development of sexually abusive behaviour in former victims of childhood sexual abuse. These include the initial identification of putative protective factors to investigate, the most appropriate study design to adopt, ethical considerations, the identification of a suitable sample, the measurement of predictor variables and the choice of analytical techniques. These will be considered in turn below, followed by a brief conclusion.

5.2 Putative protective factors

The first matter, therefore, concerns the identification of the variables to investigate as putative protective factors. In the previous chapter, it was suggested that between the two existing models of protection, the 'interaction' or 'stress-buffering' model represents the more meaningful approach if our understanding of the development of perpetrating behaviour is to be taken beyond that explained by the analysis of risk factors (see Section 4.2.2.2). Ideally, therefore, variables that have been demonstrated in previous research to interact with risk to reduce the likelihood of sexually abusive behaviour should be the focus of this thesis.

However, as indicated in the previous chapter, the only study so far that has used a quantitative methodology to identify ‘protective factors’ against the development of sexually abusive behaviour adopted the alternative ‘main effects’ approach (Borowsky et al., 1997). In addition, the vast majority of studies that have looked for factors that protect against other adverse outcomes for victims of sexual abuse have also adopted this approach. Thus, the identification of putative protective factors for investigation in this study is highly dependent on research using the main effects model. There is no reason to suppose that factors associated with a positive outcome
will also significantly interact with risk factors to reduce the risk of an adverse outcome (Rutter, 1987). There is a danger therefore, that basing the selection of variables on this literature will result in the wrong factors being investigated.

Alternative suggestions for protective factors might be derived from theories concerning the development of sexually abusive behaviour. However, there is little or no empirical support for any of these theories (see Chapter 2) and factors selected in this way would be based almost purely on conjecture. This is not necessarily an inappropriate technique to adopt but it is typically preferable to base new research on available empirical knowledge. It is therefore appropriate to investigate the protective qualities of factors that have been shown to be associated with resilience of some sort, and a lack of perpetrating behaviour in particular.

In addition, there are a few factors that have been identified as interacting with more general maltreatment risk factors (i.e. including physical abuse and neglect) to increase the likelihood of certain positive outcomes (Black, Dubowitz & Harrington, 1994; Lam & Grossman, 1997; Moran & Eckenrode, 1992). Ideally, these would also warrant investigation in this study.

A final point relating to the selection of variables to investigate concerns the relative availability of data on those variables. This will be returned to in Section 5.5 below. At this stage it is enough to highlight the possibility that data relating to certain important variables may not be readily available to investigators, depending largely on the design of the study. This would limit the conclusions that could be drawn under such circumstances.

5.3 Research design

This leads to a second matter for consideration, which concerns the basic study design. Most of the research studies conducted to date on compensatory factors, and all of those on protective factors, have employed retrospective designs (Luthar & Zigler, 1991). Whilst being necessary in identifying the areas to focus particular
attention upon, there are a number of methodological problems associated with this design.

Firstly and most importantly, it is rarely possible to identify risk factors using a retrospective design. This is because by definition, risk factors must occur at some point before the outcome does. A clear and valid temporal order for all relevant events must therefore be established. This is rarely if ever possible using a retrospective design as people are notoriously poor at placing distant events in the correct order.

In addition, there is the possibility with the retrospective design that certain individuals might deliberately give an inaccurate account of the risks they had experienced in childhood. It would be in the interest of known perpetrators to exaggerate or even fabricate risk related events in an attempt to excuse their offending behaviour or minimise their responsibility for it. Retrospective research may therefore have limited value as a means of identifying risk factors for sexual perpetration.

This is a concern in the current investigation because protective factors may only be identified by their interaction with risk factors. Hence these risks have first to be correctly identified. It is clear from the literature reviewed above that there is only weak evidence for risk factors for the development of sexually abusive behaviour (see Section 3.4). It is therefore important in this study that factors are identified that are not only associated with sexual perpetration, but which also predate the first occurrence of perpetrating behaviour. This would also allow the concept of causal relationships between risk (Luthar & Zigler, 1991), protection and outcome to be addressed, since establishing both an association and the temporal order of events is essential to investigate causality (Kazdin et al., 1997).

There are other aspects of retrospective designs that mean they are less than ideal for identifying risk factors. Subjects, whether perpetrators or non-perpetrators, may exaggerate or minimise the significance of certain events in order to fit with the explanation they currently favour. Their recollection of the event may also be distorted by their affective state at the time of the event, or at the time of the study. In
addition, they may choose not to reveal an event or may have simply not remembered it occurring.

However, the accurate identification of risk factors is not the only reason to avoid the retrospective design, where possible. Important information may be missed about how protective processes develop and change over time. The longitudinal study by Werner and colleagues showed how at various phases of life, risk factors for certain adverse outcomes alter, as do those factors that are associated with resilience (Werner, 1989). Hence protective factors may also differ in their relative effectiveness over time. One factor may be effective in reducing the likelihood of sexual perpetration at one point in the life of an ‘at risk’ individual but at another point, a different factor might be more important in averting this outcome (Luthar & Zigler, 1991).

Related to this, it is also likely that some individuals take longer to develop the outcome under examination than others. In the case of sexual perpetration, some individuals may only begin this behaviour in their middle years, for example during times of extreme stress such as divorce. A retrospective study that records outcome information at one point only may mis-classify individuals as non-perpetrators, who subsequently develop into perpetrators. This may result in certain factors being incorrectly identified as protective.

For all the reasons above, therefore, it seems more appropriate to move away from the retrospective approach and adopt a longitudinal methodology in this study. This would avoid the problems of distorted recall associated with retrospective research, allowing the correct identification of risk factors. In addition, it may be possible to identify changes in protective processes that occur over time using a longitudinal design.

5.4 Ethical considerations

There is, however, a particular ethical problem associated with longitudinal research conducted in real time into the continuity between childhood maltreatment and
subsequent perpetrating behaviour. This centres around the question of researcher
intervention and is perhaps best demonstrated by describing what such a study would
involve.

Suppose that a group of children were, by some means, known to have been sexually
abused. A longitudinal study to identify risk factors for subsequent perpetrating
behaviour on the part of these former victims would necessarily involve them being
interviewed on regular occasions about their experience of putative risk factors prior
to them perpetrating abuse. If a particular subject disclosed that he had experienced
several of these factors, the research team might suspect that he was at heightened
risk of developing this behaviour. However they would also be ethically bound to
initiate procedures that may result in removing the subject from this high risk
environment both for his sake and for the sake of his possible future victims. This
action would necessarily destroy the integrity of the study design as the subject
would not be allowed to carry on the developmental path that was likely to lead to
the outcome under investigation.

In addition to this problem there is also the more pragmatic consideration that real
time longitudinal studies take a number of years, especially ones of this nature, and
are thus extremely expensive.

5.5 Catch-up Longitudinal design

It is therefore apparent that on the one hand, a longitudinal design would be the
researcher's methodology of choice for the subject of this thesis, but that this
approach would carry with it important ethical and financial problems.

A longitudinal approach that would represent a possible solution to both of these
problems is provided by the catch-up longitudinal design (Robins, 1966). This is
described briefly in Chapter 2 (see Section 2.2.2.2) but to reiterate it would involve
the identification of a sample of individuals who were known to have been sexually
abused as children, but who would be adults at the time of the study. It is likely that a
A proportion of these adults, subsequent to their own abuse, would have perpetrated sexual abuse on others.

Data about relevant childhood variables (potential risk and protective factors) would have been recorded about these individuals in contemporaneous social services files following the disclosure of their victimisation. If these data had been recorded long enough prior to the time of the study (e.g. 10 or 15 years), sufficient time might have elapsed as to allow the development of perpetrating behaviour in those individuals for whom this outcome was going to occur. The sexual perpetrating outcome could be established from a real-time search of criminal records data and other sources.

Some of the childhood variables described in the social services files before the onset of perpetrating behaviour may then be identified as risk factors if found to be associated with this outcome. Furthermore, having highlighted the factors that predict sexual perpetration, protective factors could then be identified. Using the same contemporaneous files from which the risk factor data had been extracted, information about protective factors could also be recorded. It would then be possible to establish if these factors had any moderating effects on the risk factors, thereby reducing the likelihood of a perpetrating outcome.

There are a number of methodological difficulties associated with this design. Firstly, and most significantly, such a study would be dependent on data that had been collected for purposes different to those specific to its own requirements. Thus data about certain key risk and protective factors might simply not have been recorded at all in the files. This would limit the questions that could be addressed in such research, as alluded to above (see Section 5.2). In addition, because data might not have been recorded systematically, information about certain factors might only be available in a proportion of the files. The collection of inconsistent data might make it difficult to draw conclusions about further key questions.

A second problem is the practical one of finding a sample that fits all the necessary criteria for a catch-up longitudinal study. For example, in the case of a study such as this one (i.e. to identify protective factors against the development of sexually abusive behaviour in sexually abused males), an appropriate sample would have to
consist of sexually abused males for whom sufficient notes had been recorded both about their abuse and other putative risk and protective factors around the time they occurred. The subjects of such a sample would therefore have to have been identified by some agency (e.g., social services) either before or shortly after their own sexual victimisation. Finding a group like this would represent a considerable challenge.

However, even if this hurdle could be crossed, it would almost inevitably mean that the sample was biased in some way. This is because the subjects must have come to official attention at some point in their childhood, whilst the general population do not to any considerable degree. This in itself may have affected their outcomes. Any findings may therefore not be generalisable to the wider population of individuals from whom the sample has been drawn.

Clearly these are difficulties that where possible must be addressed, or at the very least taken into consideration when drawing conclusions. However, the catch-up longitudinal design does represent a neat solution to the ethical problems mentioned above, providing necessary and quick answers to many questions that can only be addressed by a longitudinal design.

5.6 Sample

As most of the research looking at the continuity between sexual victimisation and perpetration has used a retrospective design, it has tended to start with a group of offenders and to then look back at their childhood experiences. Given that the aims of the current study could be best achieved by conducting a longitudinal design, it is important to start with a group of individuals who have been sexually abused and then monitor what subsequently happens.

Bearing in mind, also, the particular requirements of the catch-up design, the first necessity would be to identify a sample of sexually abused individuals about whom early maltreatment information had been collected at or around the time that it occurred. The sample that would be most representative of the general population of sexual abuse victims, and therefore displaying the least biases, would be drawn from
the broader general population. However the practical difficulties inherent in drawing a large enough sample of appropriate people from the general population make it an unfeasible proposition. In addition, even if enough sexually victimised subjects were identified for whom early records of maltreatment had been taken, they must then give their permission for researchers to look at these files. As it would be unlikely that all such individuals would agree to this, those who did agree would be self-selecting thus introducing further sample bias.

A more realistic possibility for a sample would be people who had been referred to a clinic a number of years before as victims of childhood sexual abuse. The clinical notes of such individuals would be likely to contain information about risk and protective factors starting from the period when they had experienced their abuse up until when they left the care of the clinic in question. These notes could therefore be employed as a source of these data. In addition, it is possible that other agencies might also have been involved in the care of such a child (e.g. social services) and might therefore have files which would be a rich source of risk and protection data.

5.7 Measurement issues

The most significant issue concerning the measurement of the predictor variables (i.e. the putative risk and protective factors) relates to how these variables are to be defined. As described in Chapter 3, the main risk factors for sexually abusive behaviour are thought to involve the experience of different subtypes of maltreatment (e.g. physical abuse, neglect). Until relatively recently, there have been three main theoretical approaches to defining maltreatment, representing medical, sociological or legal perspectives. Each has been proposed with a particular aim in mind: the medical perspective has attempted to identify and cure the psychopathology of the sexual deviant; the aim of the sociological approach has been to label and control social deviance, whilst the legal approach has tried to standardise the legal decision making process in maltreatment cases (Barnett, Manly & Cicchetti, 1993).

However, it has been argued that there is a need to move away from the use of different definitions, depending on the purpose of the work, towards a more unified
approach (e.g. Barnett, Manly & Cicchetti, 1991; Giovannoni, 1991). This would enable the different disciplines to build on each other’s work rather than, at times, working at cross purposes.

The perspective adopted in the current study to establish the presence of both risk and protective factors is based upon the ecological approach developed by Cicchetti and his colleagues (Barnett, Manly & Cicchetti, 1993). This is consistent with the unifying philosophy described above and is grounded in a developmental psychopathology perspective, as detailed in Chapter 2 (see Section 2.4).

There are several aspects of this approach that warrant some mention. First is the principle of defining maltreatment on the basis of objectively verifiable behaviours by the perpetrator. This is in preference to definitions based upon either the presence of certain risk factors for maltreatment in an individual’s family or on the basis of negative outcomes for the individual following abusive behaviours. Establishing that risk factors for maltreatment are present in a person’s life does not necessarily mean that the person has experienced maltreatment. Similarly, the experience of maltreatment may not immediately result in an adverse outcome for an individual. These alternative approaches may therefore result in false positive and false negative ratings for maltreatment respectively.

Therefore, the presence of maltreatment is established on the basis of statements in official documents about specific abusive behaviours perpetrated on a subject. Likewise, the presence of putative protective factors is established from statements made in similar documents about situations or episodes that might buffer the negative impact of the maltreatment events. Both putative risk and protective factors are assessed according to predetermined criteria, which are set down in a coding manual (see Appendix 2).

Second, this approach incorporates the principle that each aspect of maltreatment and protection, i.e. the parent, the child and the surrounding environment, transact over time (Cicchetti & Rizley, 1981). For example, the needs of a child are known to change with time with regard to attachment, acceptance and positive self-regard (Barnet, Manley & Cicchetti, 1993). Thus certain acts might be regarded as
maltreatment at one age but not at another, or other factors to be protective at one stage but neutral at another.

The third notable aspect of the approach adopted in this study is the use of dichotomous measures to assess risk and protection. With respect to risk, these are used in place of the severity scales proposed by Cicchetti and colleagues, which might appear to be a retrograde step. It would seem likely that by establishing the severity of the maltreatment experienced by a subject, a more accurate prediction could be made about the subject’s outcome. However, no direct relation has yet been found by Cicchetti and his colleagues between the severity of maltreatment and child outcome (Barnett, Manley & Cicchetti, 1993). In addition, the main focus of this thesis is the identification of protective factors, not adding to an already large literature on establishing risk factors. Thus it is considered an unnecessary complication to adopt severity scales for each potential risk factor and simple presence/absence measures are preferred.

For the majority of the protective factors measured, a similar approach is adopted. Research on the identification of protective factors is not as advanced as similar research for risk factors. It is considered an appropriate first step to use dichotomous measures to establish the presence of protection. Those variables that show some promise might be worthy of further investigation using scaled measures at a later date.

5.8 Perpetrator information bias

It is important not only that events relating to risk and protection occurred before the onset of perpetrating behaviour, but that the evidence about these events was recorded before that date. It would otherwise be possible that a bias could be introduced by clinical and other investigators relating to the amount and type of data recorded for perpetrators of abuse compared with non-perpetrators.

For example, it may be that an individual, known to social services as a child victim of sexual abuse subsequently began perpetrating whilst still aged under 16 years. In
an attempt to establish the extent of the risk he presented to the community, it would be necessary for social services to investigate his childhood experiences even more thoroughly than they had at the time these events occurred. Thus there might be more information from childhood about victims of abuse who became perpetrators than about those who did not. Any differences in risk and protective factors between perpetrators and non-perpetrators might simply be due to this.

It would therefore be important to only use information relating to risk and protection that was recorded prior to the onset of perpetrating behaviour, in situations where that developed.

5.9 Perpetrating outcome

Any data collected on risk or protection would, of course, be meaningless without a valid assessment of the outcome, i.e. whether the subject had become a perpetrator of sexual abuse. The advantage of the catch-up longitudinal design is that information about this behaviour might be available immediately. If the clinical files had been written a sufficient number of years prior to the start of the current study, the former patients might have already become adults. It would therefore be possible, given access to these individuals’ criminal records, to establish which of them had subsequently been identified as perpetrators of sexual abuse. In addition, there may be sufficient evidence in other files (clinical, social services, probation) of perpetrating behaviour that post-dated the data on risk and protection, but which for some reason had not resulted in a caution or a conviction.

There are particular difficulties in establishing outcomes that relate to criminal behaviours. These centre around the fact that such behaviours are generally covert, with individuals being reluctant to admit to them for fear of legal and social reprisals. These fears may be particularly marked for sexual abusers of children. Thus the most accessible source of data on this outcome is likely to be official legal records. In addition, the possibility of false positives (i.e. subjects identified as perpetrators who in reality were non-perpetrators) would be minimal given the amount and quality of evidence necessary to secure a caution or a conviction in such cases.
However, reliance on criminal records is likely to result in a number of false negatives (i.e. subjects classified as non-perpetrators who had in fact perpetrated) as episodes of sexual abuse may lack sufficient incriminating evidence or may even escape police detection entirely. This may affect the conclusions that can be drawn from such data.

On the other hand, the inclusion of outcome data from less objective sources such as contemporaneous clinical and social service files introduces the possibility of a different type of error. Unsubstantiated hearsay about sexual offending may appear in such a record and result in an invalid classification of a particular subject as a perpetrator, thereby distorting the results. The system of classification for the outcome would therefore need to balance the risks of these two sources of error.

5.10 Data analysis

According to the stress buffering model of protection adopted in this thesis, evidence of a significant statistical interaction between risk and protective factors must be found for a protective effect to be established. This would first involve identifying risk factors for perpetrating behaviour in this sample. Risk factors would be those variables that were more present in the early life of individuals who later went on to perpetrate (victim-perpetrators) than those who were not known to do so (victims-only), and which therefore correlated with the perpetrating outcome. These could be identified using the appropriate statistic (e.g. odds ratio, Mann-Whitney U-test, t-test) depending on the nature of the risk factor in question.

Evidence of a statistical interaction between risk and putative protective variables is investigated by different statistical techniques depending on the nature of the outcome under examination. If the outcome variable is a continuous measure, e.g. level of depression, the appropriate test to adopt is a linear (Ordinary Least Squares/OLS) regression technique in which interactions are estimated as probability differences (Landerman, George, Campbell & Blazer, 1989). When the outcome is a dichotomous variable, logistic regression or log-linear models, in which interactions
are estimated as odds ratios, are typically the more appropriate ones to use as there is less error using this technique (Cleary & Kessler, 1982; Landerman et al., 1989).

Given the fact that the outcome under investigation in the current study is dichotomous (i.e. sexual perpetrator or non-perpetrator) it would seem that a logistic regression should be the one employed. However, Kessler (1983) demonstrated that these different techniques can produce discrepant findings when testing for interactions such that significant effects may only be found using the linear difference (OLS) model. Logistic (ratio) models can miss non-additive changes in the absolute risk of an outcome because not all such models specify that statistical interactions are multiplicative.

Furthermore, there is widespread disagreement in the resilience literature concerning which model to adopt when the results are discrepant in this way and no agreement even about which factors are important in choosing one over the other. There is also no way to empirically determine which of the two most closely highlights the causal processes that are reflected in the data (Kessler, 1983).

From Kessler’s recommendations, it therefore appears that in the first place a logistic regression should be performed. If the results from this model were to indicate a significant interaction, this should be accepted as sufficient evidence of the modification of the effect of risk on the dichotomous outcome, i.e. a protective effect. If no such interaction were found, this could not on its own be relied upon. A further linear regression would need to be performed to see if a significant interaction was detected by this technique. If no such interaction were found using this alternative model, it could safely be assumed that these risk and putative protective factors did not interact. If however an interaction were found, it is suggested that one examines whether one’s theory about the link between risk and outcome might lead one to favour one of the models over the other. If this were not the case, no clear conclusions about interactions could justifiably be made (Kessler, 1983 p.289).

A final matter of interest concerns the way the data are to be organised in order to test for risk and subsequently, for interactions between putative protective factors and risk. The most viable approach becomes apparent if the second issue is dealt with.
first. There are four main reasons, three theoretical and one practical, why a cumulative approach to risk in its interaction with protection should be adopted. This would involve creating an index of risk consisting of the number of risk factors experienced by the subject. First, with regard to the theoretical reasons, there have been several studies in which significant relationships have been found between the *number* of risk factors present and a range of outcomes (Jessor, Van Den Bos, Vanderryn, Costa & Turbin, 1995). Second, it appears form the review of the maltreatment risk factor literature (see Chapter 3) that there is considerable overlap in the effects of such risks and no clear theoretical or conceptual reason to weight one factor over another in relation to a perpetrating outcome. Finally, it has been found that different risk factors can have a potentiating effect on each other (Rutter, 1979). The pragmatic reason relates to the possibility that a number of risk factors may be found for sexually abusive behaviour. If several risk factors were to be assessed individually, the number of logistic regressions that would need to be performed to test for all the possible combinations between the risks and the putative protective factors would be prohibitive. Thus it seems appropriate to combine the risk factors into a cumulative risk index to enable interactions with putative protective factors to be analysed.

In the first place, and for similar conceptual and practical reasons that were given in support of a risk index, the protective factors might also be combined to form a cumulative protective index. Given the number of variables that could be tested, it might be an appropriate initial step to establish that a conceptually meaningful combination of putative protective factors interacts with a similarly sensible grouping of risk factors. Indeed, there have been several precedents for this approach (e.g. Jessor et al., 1995; Lam & Grossman, 1997). If a significant interaction were to be found, further unpacking could be performed in the form of tests for interactions between the risk index and individual protective factors.

However, if there was a non-significant interaction between the risk and protective indices, it could also be argued that certain of the variables in the protective index might be masking the genuine protective effects of other component variables. Given this possibility, it might be appropriate to establish the individual protective effects
of the putative protective variables irrespective of the significance of the interaction between the indices.

A pertinent question still remains concerning the make-up of the risk and protective indices. It would be important to discuss what constitutes a conceptually meaningful combination of both risk and protective factors. For both classes of variables, this should be dependent on the conclusions that can be drawn from their respective literatures. In addition, it would be necessary to consider any limitations on data collection imposed by the study design. This will be described in more specific detail in the next chapter (see Section 6.5.1.4).

5.11 Summary

There are a number of methodological issues to consider when attempting to identify protective factors against the development of sexually abusive behaviour in sexually victimised males. This chapter has involved a discussion of many of these points and a number of conclusions were made. On the balance of the discussion, the following methodological principles for the present study can be drawn:

- identify putative protective factors on the basis of both interactive and main effects models of protection;
- adopt the catch-up longitudinal design as most appropriate for this study;
- identify a clinical sample of sexual abuse victims referred a number of years ago, about whom data on risk and protective factors had been recorded at that time;
- only use contemporaneous data that was written prior to any sexual perpetration by the subject to avoid potential biases;
- establish outcome from multiple official records sources; and
- employ logistic and linear regression techniques to identify protective factors.
In the next chapter, a detailed description will be given of the methods that were used to identify protective factors against the development of sexually abusive behaviour in sexually abused males.
Chapter Six  Methods

6.1 Aims

The main aim of the study was to identify protective factors against the development of sexually abusive behaviour in males who had been exposed to risk factors for that behaviour. It was therefore necessary first to identify risk factors and then to establish which factors protected against the perpetrating outcome.

6.2 Hypotheses

Two main hypotheses were proposed on the basis of reviews of the relevant literature.

- A risk index consisting of key experiential risk factors (sexual victimisation by a female, discontinuity of care, experiencing physical abuse, witnessing intrafamilial violence, neglect - failure to provide, neglect - lack of supervision, rejection by carers) would discriminate between those sexually victimised males who went on to perpetrate sexually and those who did not do so.

- A statistically significant interaction would be found between the risk index and a protective index, comprising key protective variables (good relationship with an adult, good relationship with a sibling, good relationship with a peer, years spent in foster care, number of non abusive male carers by age 12, number of non abusive female carers by age 12, longest time subject cared for by the same carer, low number of care units by age 12). This would indicate that these factors served to protect against sexual perpetration in an otherwise at risk group.
6.3 Design

For the reasons described in the previous chapter (see Section 5.5) a ‘catch-up’ longitudinal design (Robins, 1966, Widom & Ames, 1994) was employed in this study. This approach involves a researcher utilising data that had been originally collected, usually by other individuals, for reasons unconnected to the researcher’s aims. An individual’s status on the outcome variable of interest is then established from contemporary sources. This distinguishes the catch-up design from the more usual longitudinal design in which data about variables thought to play a causal role in producing an outcome are collected in real time. Amongst other advantages, the catch-up design allows a longitudinal approach to be adopted without the long delay that is inherent in real time longitudinal designs. A more detailed description of the catch-up longitudinal design and the rationale for its use in the present research has been given in Chapter 5 (Section 5.5). Its application to address the aims of the current project is described below.

This design was used to examine hypothesised protective factors against the development of sexually abusive behaviour in sexually victimised males. Before this was possible, however, it was first necessary to identify risk factors for this behaviour. Information on hypothesised risk and protective factors was collected from clinical and social services case files held on sexually victimised males. Information on sexual perpetration was collected from clinical and social service material, as well as from criminal records. The identification of both risk and protective factors was based entirely on data originally gathered before the onset of sexual perpetration. This was to ensure that the outcome would not have been known when the data had been first recorded, a necessary criterion for any longitudinal design.

6.3.1 Department of Health Study

The research work that formed the basis of this thesis was carried out within the context of a wider project investigating the development of sexually abusive
behaviour. The current author was one member of a five-person research team employed to carry out this project, which was funded by the Department of Health. The main aim of this research was to identify risk factors for the development of sexually abusive behaviour in sexually victimised males. Much of the work that focussed on the identification of risk factors was therefore a collaborative process. In addition to this work, the author was responsible for the research to identify protective factors against the development of this behaviour.

6.3.2 Ethical approval

Ethical approval for the study was given by The Great Ormond Street Hospital for Sick Children NHS Trust / Institute of Child Health Research Ethics Committee (see Appendix 4). The Association of Directors of Social Services gave its backing to the study and permission was also given by the Director of Social Services or the Child Protection Co-ordinator of each of the social service departments involved. The Office for National Statistics gave approval for the use of medical records for research purposes (see Appendix 5). The Crime Committee of the Association of Chief Police Officers gave its support to the research, and the Chief Constables of the constabularies involved gave permission to obtain caution and conviction data (see Appendix 6).

6.3.3 Structure of the study

The tasks in the study can be conceptually grouped into three interrelated processes (see Figure 6.1). The first process was the creation of appropriate research tools. This included the development of a system for the measurement of maltreatment from the raw data documented in the clinical and social services case files. It also involved establishing the reliability of this system, and the development of supporting software.
The second process involved establishing the presence of predictor variables (i.e. risk and protective factors). This consisted of the identification of the sample and the extraction of relevant information from clinical records to enable the tracing of social service files. However the greater part of this process involved the extraction of information from the case files. This latter part was not possible until the first process had been fully completed, which demonstrates the interrelatedness of the processes.

The third process involved establishing the outcome variable. This included the negotiation of access to criminal records information, which was thought initially to represent the main source of outcome data. Additional identifying information on the subjects was then gathered to permit the tracing of these records through the Office for National Statistics.

6.3.4 Minimisation of researcher bias

Before these three processes are described in more detail, a more general point about the methodology must be made. As Figure 6.1 indicates, a distinction was made between the trawling and the scoring of case file material. Trawling referred to the process of reading a case file, and extracting quotes that related to one or more of the risk or protective factors. This process also involved establishing the subject's care history and extracting demographic information about him and his family. Coding referred to the process of assigning quantitative scores that represented the degree of exposure the subject had experienced to each risk and protective factor, on the basis of the extracted quotes.

This distinction was made in order to minimise researcher bias. In the process of trawling, the researcher would generally become aware of whether a subject was a perpetrator of sexual abuse. It was likely that this knowledge might influence the risk and protective scores this researcher assigned to the extracted quotes. For example, if the subject was a perpetrator, there might be a tendency for higher ratings.
Figure 6.1 Structure of the study

**Process 1**
- Generate Manual and Trawling Program
  - Pilot Manual and Trawling Program
  - Establish Trawling and Scoring reliability
  - Re-establish Scoring reliability

**Process 2**
- Identification of the sample
  - Extraction of identifying information
  - Location of social service files

**Process 3**
- Trawling of social service and clinical files
- Search of Register of Births in England and Wales
  - Office of National Statistics search
  - Search of caution and convictions records

**Analysis**
of risk and lower ratings of protection to be made, where ambiguous evidence existed.

For this reason, no single researcher was ever required to perform the roles of both trawler and coder for the same subject. A more detailed description of this procedure is given in the trawling and coding section in ‘Process 2’ or in the introductory section to the Trawling & Coding Manual (Appendix 2).

6.4 Participants

The final study sample comprised 104 males who had been victims of sexual abuse and who had been referred to the Child Sexual Abuse Team in the Department of Psychological Medicine at Great Ormond Street Hospital for Children between 1980 and 1992. The total population of sexually abused boys who had been referred to the team in this period was 601. The selection procedure that resulted in this high attrition rate is described below (Figure 6.3).

It was established from criminal records and social service files that 21 subjects in the sample had gone on to perpetrate sexual abuse following their own sexual abuse. These were known as the ‘Victim-Perpetrator’ group. The remaining 83 subjects had not perpetrated sexual abuse and were known as the ‘Victim-only’ group. The mean age of the victim-perpetrator group was 23.29 years (s.d. 4.28, range: 18.11 to 32.19) whilst that of the victim-only group was 21.73 years (s.d. 2.81, range: 18.07 to 30.76). The age difference between these groups approached, but did not reach statistical significance (t = 1.59, p=.12).
6.4.1 Ethnicity

It was possible to establish the ethnicity of a relatively small proportion of the study sample (65.4%) as this information was recorded inconsistently in the files. However, of the 68 subjects for whom information was given, 59 (86.8%) were European White, 4 (5.9%) were Afro Caribbean, 4 (5.9%) were Multi ethnic and one was Asian.

6.4.2 Socioeconomic status

As with ethnicity, information about the subjects' socioeconomic backgrounds was extremely sparse. Thus no attempt was made to classify their status in this regard.

6.4.3 Place of residence

Of the total sample, 63 subjects (60.6%) were living at home with at least one biological parent at the time they were referred to GOSH. Of the remainder, 20 (19.2%) were living in a children's home, 17 (16.3%) were living with foster parents and for 4 of the subjects (3.8%) it was not possible to establish what their living arrangements had been at this time. Overall, and excluding these 4 subjects, there was no association between which group (V or VP) the subject was in and whether he was living with his family ($\chi^2 = .26, df = 1, p>.05$).

With regard to the geographical region from which the subjects were referred, 39 (37.5%) were living in Greater London, 49 (47.1%) were living in the Home Counties (i.e. Buckinghamshire, Hertfordshire, Essex, Kent, Surrey, Middlesex and Berkshire) and 16 (15.4%) were living in other parts of the England or Wales. Overall, there was no association between the subject's group and the region he was referred from ($\chi^2 = 4.04, df = 2, p>.05$).
6.4.4 Involvement with professional agencies

Although all the subjects had been referred to the Department of Psychological Medicine at Great Ormond Street Hospital, only 54 (51.9%) were actually seen there. The reasons for the remaining 50 subjects not being seen were varied. Often, social services found alternative treatment centres for the subject’s care that were available sooner than GOSH, but some individuals simply failed to attend prearranged assessments. Occasionally GOSH professionals turned a referral down if appropriate criteria (e.g. age) were not met or if safety had not been assured for the subject.

Eighty subjects (76.9%) were referred by social services whilst 23 (22.1%) were referred by some other source including General Practitioners, Paediatricians and Psychiatrists from other institutions. The source of referral could not be established for 1 subject (1%). Eighty-five subjects (81.7%) were referred as a direct result of their sexual victimisation although for 9 subjects (8.7%) the reason for referral could not be established. The remaining 10 (9.6%) subjects were either referred for other mental or physical health reasons or because they had already begun to act out sexually.

The mean age of the subjects at referral was 10.69 years, with the youngest being 4 years 7 months and the oldest 19 years and 3 months. The difference in age at referral between the two groups was not significant (t = .075, df = 95, p>.05). The age of 7 subjects (6.7%) at the time of their referral was not known.

6.4.5 Status of subject at referral

Details of the involvement of social services, the courts and education authorities at any point in the subjects’ lives prior to age 16 years or the onset of perpetration (whichever came first) are given in Table 6.1 below. The victim-perpetrators did not significantly differ from the victims-only with regard to any of these variables.
Table 6.1: Details of professional involvement with subjects

<table>
<thead>
<tr>
<th></th>
<th>No. of subjects (% of total sample)</th>
<th>Number (%) of Victim-perpetrators</th>
<th>Number (%) of Victims-only</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Child Protection Register</td>
<td>54 (51.9)</td>
<td>12 (57.1)</td>
<td>42 (50.6)</td>
</tr>
<tr>
<td>On Care Order</td>
<td>43 (41.3)</td>
<td>7 (33.3)</td>
<td>36 (43.4)</td>
</tr>
<tr>
<td>Ward of Court</td>
<td>29 (27.9)</td>
<td>6 (28.6)</td>
<td>23 (27.7)</td>
</tr>
<tr>
<td>Statement of Educational need</td>
<td>19 (18.3)</td>
<td>5 (23.8)</td>
<td>14 (16.9)</td>
</tr>
</tbody>
</table>

6.5 Procedures and Materials

6.5.1 Process 1: Creation of research tools

6.5.1.1 Generation of the Computerised Trawling program

Social services and clinical case files were used as sources of the necessary data about the risk and protective factors that each subject had experienced. However these contemporaneous files were extremely large, often running to many volumes. It was therefore necessary to find a way of condensing this information into a more digestible form for coding to subsequently take place. It was for this reason that the Computerised Trawling Program was designed: to facilitate the collection, storage and retrieval of case file material. The program was developed in a Windows 95 ACCESS format. For each subject, the program was used in the following way:
Basic demographic information on the subject (e.g. name, date of birth etc) and the case file (e.g. start date and end date of file, size of file) was recorded in a computerised cover sheet.

The researcher read the file until s/he reached a quote relating to risk or protective factors, which met the criteria for extraction described in the manual. This quote was then typed into the text box of the Quote Screen. The risk or protective factors to which the quote referred was then recorded by clicking on one or more electronic tick boxes (known as ‘tagging’ the quote to a factor). The date of the document from which the quote was extracted was also recorded.

During trawling, all the extracted quotes referring to one factor could be retrieved by positioning the cursor on the factor name (e.g. experiencing physical abuse) and then double clicking. This allowed the trawler to establish what information had been trawled, and what still needed to be recorded.

The process of reading and extracting quotes was continued until the file had been read in its entirety.

The trawler would use the quotes extracted about the subject’s care history to generate a care table. Each change in care arrangements, which had lasted for a month or more, would be recorded in the care table along with supporting quotes. The introduction section to the Trawling and Coding Manual (Appendix 2) provides further details of the procedure for constructing the care table.

A copy of the trawling program can be obtained from the author.

6.5.1.2 Development of the maltreatment and protection measurement systems

The Maltreatment and Protection measurement systems were developed in parallel with the computerised trawling program described above. The conceptual principles for the measurement of protection and maltreatment adopted in this thesis were described in the previous chapter (see section 5.7). The Trawling and Coding Manual (See Appendix 2) was created on the basis of these principles.
A first draft of the manual was written on the basis of concepts drawn from the literature concerning the measurement of maltreatment. The manual was refined using a reflexive process of piloting and redrafting.

Piloting consisted of the trawling and scoring of Great Ormond Street Hospital clinical files held on cases referred to the Department of Psychological Medicine, but who were not included in the sample used in this thesis. These cases included sexually victimised females referred between 1980 and 1992, and both male and female victims referred after this time. The manual was generated and refined independently of cases that were to be used to establish reliability. This was to ensure that the reliability was generalisable beyond the cases on which piloting took place.

The pilot cases were trawled and scored by each member of the team, and the team would then meet to compare the scorings that had been made, and to discuss any difficulties. Matters that arose relating to risk factors were resolved by consensus decisions made within the whole team, and these were then incorporated into the new manual. Issues relating to the trawling or coding of protective factors were referred by the other team members to the author, who then made alterations to the manual where necessary. This procedure was repeated until no new major difficulties emerged.

The completed Trawling and Coding Manual (see Appendix 2) consisted of an introduction, a ‘Risk Factor’ section and a ‘Protective Factor’ section. In the introduction, general guidance was given about both trawling the files and subsequently coding the extracted quotes. The ‘Risk Factor’ section consisted of a chapter focussed on each of the maltreatment subtypes whilst the ‘Protective Factor’ section comprised guidelines for the extraction and coding of quotes relating to the putative protective factors. The two latter sections are described in more detail below.
6.5.1.3 Risk factor section

The chapters relating to the putative risk factors were designed to enable the reliable extraction and coding of information about those factors. This included sections concerning the following: definitions of terms; the appropriate tagging of quotes to factors; the criteria an individual had to meet to be considered a perpetrator of a maltreatment subtype; and specific difficult issues relating to that factor.

For the purpose of this thesis, the main consideration was simply the presence or absence of any particular risk factor. Guidance on coding the presence of a risk factor as a dichotomous variable was contained within a specific section in the chapter. The title of this section depended partly on the factor under investigation. For example, within the chapter focused on 'experiencing physical abuse', the title was "Dichotomous question: Did the subject experience physical abuse". The risk factors included in the study were drawn from the research literature, as summarised in Chapter 3. A table of the risk factors investigated, and the minimum criteria needed for their presence to be coded, is given below (see Table 6.2). For more details, please refer to Appendix 2.

Table 6.2: Minimum criteria for coding putative risk factors as present

<table>
<thead>
<tr>
<th>Putative risk factor</th>
<th>Minimum criteria for presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical abuse</td>
<td>Evidence of minor marks on body, non-specific statement that subject had been physically abused</td>
</tr>
<tr>
<td>Witnessing intrafamilial violence</td>
<td>Subject witnessed violence between two persons, at least one of whom was a family member.</td>
</tr>
<tr>
<td>Neglect (failure to provide)</td>
<td>Subject missed odd meals, presented as dirty, lived in squalor, failed to attend medical appointments</td>
</tr>
<tr>
<td>Neglect (lack of supervision)</td>
<td>Inadequate supervision for up to a morning (&lt;3 hrs) or for an unspecified duration</td>
</tr>
<tr>
<td>Rejection by carers</td>
<td>Evidence of hostility, degradation, blaming, harsh punishment, rejection, preference for others, threats to kill or remove</td>
</tr>
<tr>
<td>Discontinuity of care</td>
<td>Physical separation from a primary carer for 1 month or more, excluding holidays</td>
</tr>
<tr>
<td>Sexual abuse by a female</td>
<td>Any sexual contact with female, either forced or with perpetrator who was two years older</td>
</tr>
</tbody>
</table>
6.5.1.4 Protective factor section

This section dealt exclusively with the trawling and coding of protection and comprised seven chapters, each of which focussed on either a single putative protective factor or a group of conceptually related factors. Brief definitions of these factors are given in Table 6.3 below, although more detail is contained within the Trawling and Coding Manual (See Appendix 2).

The structure of each chapter in the protective factor section was specifically designed to deal with the issues thought likely to arise with the particular protective factor under discussion. However, each one tended to start with definitions of the key terms followed by the coding questions. These questions were accompanied by explanations or clarifications concerning how they might be answered reliably. (See Appendix 2).

Table 6.3: Definitions of putative protective factors

<table>
<thead>
<tr>
<th>Putative protective factor</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of non-abusive male primary carers prior to the subject’s 12th birthday</td>
<td>Number of adult males who had lived for a year or more with the subject in a parenting role, and had not sexually or physically abused, neglected nor rejected the subject at any time</td>
</tr>
<tr>
<td>Number of non-abusive female primary carers prior to the subject’s 12th birthday</td>
<td>Number of adult females who had lived for a year or more with the subject in a parenting role, and had not sexually or physically abused, neglected nor rejected the subject at any time</td>
</tr>
<tr>
<td>Number of sexually non-abusive male primary carers before subject’s 12th birthday</td>
<td>Number of males who had lived for a year or more with the subject in a parenting role, and had not sexually abused the subject at any time</td>
</tr>
<tr>
<td>Number of sexually non-abusive female primary carers before subject’s 12th birthday</td>
<td>Number of females who had lived for a year or more with the subject in a parenting role, and had not sexually abused the subject at any time</td>
</tr>
<tr>
<td>Number of years in non-abusive foster care</td>
<td>Total number of decimal years spent living with foster parents who had never sexually or physically abused, neglected nor rejected the subject</td>
</tr>
<tr>
<td>Number of care units before subject’s 12th birthday</td>
<td>Number of care arrangements lasting at least one month experienced by the subject up to the age of 12 years - this factor is reverse scored</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>The longest uninterrupted period spent living with the same primary carer in decimal years</td>
</tr>
<tr>
<td>Good relationship with adult</td>
<td>Evidence that at least one relationship with an adult is emotionally supportive for the subject or described as close/good, with no evidence of abuse</td>
</tr>
<tr>
<td>Good relationship with sibling</td>
<td>Evidence that a relationship with a sibling is one of mutual cooperation and friendship or described as close/good, with no evidence of abuse</td>
</tr>
<tr>
<td>Good relationship with peer</td>
<td>Evidence that a relationship with a non-family member under 18 years old is a reciprocal friendship or described as close/good, with no evidence of abuse</td>
</tr>
<tr>
<td>Treatment</td>
<td>Subject had at least one meeting, after his sexual abuse, with a psychological health care worker</td>
</tr>
<tr>
<td>Positive response to disclosure</td>
<td>Evidence that a non-abusive primary carer believed the disclosure or acted to prevent further abuse</td>
</tr>
<tr>
<td>Perpetrator convicted</td>
<td>Evidence that the perpetrator of the subject’s sexual abuse was convicted of his offences in a court</td>
</tr>
</tbody>
</table>

A brief explanation for the inclusion of some of these factors, as defined above, may be necessary, as well as the exclusion of other possible protective factors. Many of the included factors are designed to indicate the availability of stable, non-abusive figures for the subject either to form attachments to or to model his behaviour on (e.g. continuity of care, good relationship with adult/sibling/peer). This is based upon evidence in the literature on protection against maltreatment, which suggests such factors are protective against certain adverse outcomes (e.g. Lam and Grossman, 1997; Lynskey & Fergusson, 1997; Spacarrelli & Kim, 1995). However, it might appear unclear as to how some of the factors could be protective. For example, the factors ‘number of non-abusive male/female primary carers’ might be interpreted as more representative of risk than of protection, since a higher number could indicate less stability in the subject’s care arrangements.

The reason for this approach being adopted relates to the nature of the population from which the sample was drawn and particularly the severity of the maltreatment that its members have typically experienced. It was expected that a high proportion of the subjects in this sample would have experienced many care arrangements, with very few of them containing non-abusive carers. Therefore, it was hypothesised that the more non-abusive care figures in a subject’s life who modelled consistency and support, the more protective it would be for that subject. However, the extent to
which these particular factors do or do not represent risk will be assessed statistically in the next chapter (see Section 7.4.1).

There are a number of putative protective factors that were thought to warrant some investigation in this study on the basis of the resilience literature, but are not in the list above. These included some measure of intelligence, achievements at school and extra-curricular achievements. An attempt was made to establish the presence of these factors in the various files. However, the recording of information about these factors was so rare as to render meaningless any analysis based on these data.

6.5.1.4.1 Construction of the Protective Index

Although the protective index was not specifically described within the manual, being a construction for the purpose of the statistical analysis only, it seems appropriate at this point to give the details of, and account for, the selection of factors that made up the index, and to describe how the index was calculated.

The protective index consisted of the following variables: good relationship with an adult; good relationship with a sibling; good relationship with a peer; years spent in foster care; number of non-abusive male carers by age 12; number of non-abusive female carers by age 12; longest time the subject lived with the same primary carer; number of care units by age 12 (reverse scored).

As stated above, the review of the resilience literature highlighted the importance of factors indicating the strength of the positive relationships between maltreated children and non-abusive individuals who were significant to them. The factors listed above were selected for inclusion in the protective index, prior to any empirical analysis, on the basis of their relatedness to this concept.

As detailed above, the protective index consisted of a combination of binary and continuous variables. In order to avoid undue weighting being given to continuous variables in the construction of the index, all variables were standardised. These standardised values were then summed to create the protective index.
6.5.1.5 Reliability

Adequate inter-rater reliability was established for the five individuals who trawled the files and the four who coded the resultant data for the majority of factors. Details of the method used to initially establish reliability of trawling and coding, to re-establish the reliability of coding and the results of all these tests, are given in the appendix (See Appendix 1).

6.5.2 Process 2: Establishing presence of predictor variables

6.5.2.1 Identification of the Sample

The sample was generated on the basis of records held at the Department of Psychological Medicine, Great Ormond Street Hospital for Children, NHS Trust.

The sample selection process is represented in Figure 6.2 and the inclusion/exclusion criteria for the sample are given in Figure 6.3.

6.5.2.2 Location of social service files

The Department of Psychological Medicine, Great Ormond Street Hospital held clinical files on all the sample subjects and they were made available for this study. Initially, they were used to locate each subject’s social service file that, it was hoped, would contain more detailed information on risk and protection. The clinical files were examined therefore, and the following information extracted:

- Full names of the subject, including all changes in name and variations in spelling
- Date of birth, including all recorded variations
- Address of the subject, all family members, General Practitioner and the social services department involved in the case.

An attempt was made to locate the social service files of subjects who met two criteria: the subjects would be aged 18 years or older on 01.05.99; there was sufficient information in their clinical file (subject’s first name, last name, date of birth, or sibling
Figure 6.2: Selection of the sample

**Stage a**
Starting sample  
N = 601

**Stage b**
Aged > 18 (01.05.99)  
N = 449  
Aged < 18 (01.05.99)  
N = 152

**Stage c**
Sufficient information for tracing files  
N = 427  
Insufficient info. for tracing files  
N = 22

**Stage d**
Social service depts. agree to take part  
N = 408  
Social service depts. decline to take part  
N = 19

**Stage e**
Social service file found on system  
N = 292  
Social service file not found  
N = 116

**Stage f**
Social Service file selected for study  
N = 139  
File excluded  
N = 153
- Not sex abuse victim = 61  
- SSD lost file = 44  
- No info. predating perpetration = 44  
- Female = 2  
- Left country = 1  
- Died = 1

**Stage g**
Selected  
N = 104  
Deselected  
N = 35
- Brothers of final sample members
Stage a
Males referred from 1980 to 1992 to the Child Sexual Abuse Team at the Department of Psychological Medicine, Great Ormond Street Hospital. Male children mentioned in the case files as victims or perpetrators of child sexual abuse were also included.

The Department of Psychological Medicine first received referrals for childhood sexual abuse in 1980. Children referred during or after 1992 were included in a hypothesis generating study that informed the selection of risk factors for the Dept of Health study. These subjects were excluded to ensure an independent assessment of the hypotheses under examination in the current thesis.

Stage b
The male had to be less than 16 years old at the time of referral, and over 18 years on 01.05.99. These criteria were imposed to ensure some subject homogeneity in age.

Stage c
The Great Ormond Street Hospital file had to contain sufficient data to permit the tracing of the subject’s social service file (at least his first and last names and his date of birth, or the same information on a sibling).

Stage d
The social service department believed to be holding the social service file on the subject had to agree to take part in the study. Subjects who were from areas that declined to take part were therefore excluded from the sample.

Stage e
Subjects for whom social services considered no file existed were excluded from the sample. The procedure for tracing social services files is described in section 6.5.2.2. This criterion was imposed to ensure homogeneity between subjects in terms of information on risk factors.

Stage f
Subjects were excluded if their file had accidentally gone missing within social services premises. Further subjects were excluded if, after viewing their files:
- They were found not to have been sexually victimised, nor to be perpetrators
- Although perpetrators of sexual abuse, they had never been sexually victimised.
- No information was found that predated sexual perpetration.
- Miscellaneous reasons applied (e.g. subject no longer lived in England, subject was in fact female, subject had had a sex change operation.)

Stage g
In 14 families, several subjects mentioned in one file (i.e. family members) met all the criteria for inclusion. In this event, one subject per family was selected at random to ensure the assumption of statistical independence was not violated.
with this information) to permit the social service department who might be holding the file to be traced.

It should be stated that although the sample selection process described in Figure 6.2 is thought to be the clearest way of detailing how the final sample of subjects was arrived at, it does not represent the search process as it occurred chronologically. It is clear that there is 'more than one way of cutting the pie' to lead to the final study sample of 104 subjects. For example, according to Figure 6.2, the first group of subjects to be withdrawn from the study were those individuals who were still under 18 on May 1st 1999 (N= 152), leaving a total of 449 subjects. However, at the time of the research, it was necessary to remove as many subjects as possible from the study to minimise the number of persons that Social Services departments would be asked to trace. Furthermore, for many subjects, more than one date of birth was given, and sometimes none. Therefore, in the initial stages, subjects were removed for several reasons, including: being too young; clearly not being a victim of sexual abuse; living abroad; being dead. Once the subjects who were definitely not appropriate for this study had been removed (N=125), Social Services were then contacted about the remainder (N=476).

It is important to note that the following information is a reflection of a small section of the attrition process as it actually occurred. It does not match directly with the data in Figure 6.2. However, it is thought that these data do represent pertinent and relevant information for the reader to be aware of the details of the research process, as it occurred.

For each of the 476 subjects referred to above, a letter was written to the relevant social service department inviting them to take part in the study. The social service department was established on the basis of the social service address given in the file (N=257; 54%), or in the absence of this address on the basis of the subject's most recent address (N=219; 46%). Fifty-three social service departments were contacted, all of which were in England, including 29 London Borough departments. Fifty of the
53 departments agreed to take part in the study (94%), which led to the exclusion of 19 of the 476 subjects (4%). Of the three departments that declined to take part, two were London Borough Departments and one was outside London. One department refused to take part because of the sensitivity of the cases held by them, two refused as a result of ethical concerns.

For those departments agreeing to take part in the study, an information sheet was generated on each subject, giving details of his name (including changes and variations), date of birth (where necessary including variations) and addresses (subject, family member, GP, social services). This was sent to the assigned social service department to help in the tracing of the files.

If a file was not located in the first search, the clinical file was re-examined for additional information. This either led to a second search in the same area using the additional information, a search in a different area, or one in both. In some cases, the computerised system used by a social service department indicated that the department had previously held the social service file but it had since been moved to another department. In these cases the new department was contacted and invited to take part in the study.

No limit was placed on the number of times a subject could be searched for in different social service areas; searching continued until no new avenues could be found. Of the 457 subjects who were searched, files were located for 350 of them (77%). Of the 350 located files, 298 (85%) files were found on the first search, and 52 (15%) required two or more searches either in the same department or in different departments.

To clarify again, this group of 350 were further reduced down to the final sample of 104 as a result of information contained within their files, including: a definitive date of birth indicating they were too young; a complete lack of evidence that they had
been sexually abused; they were one of two or more brothers and were removed to ensure statistical independence.

6.5.2.3 Subjects' abuse/perpetration status at referral

It should be mentioned that although all the subjects in this study had been sexually victimised when they were referred to GOSH, a sub-group of subjects (n=5) were also known to have already perpetrated sexual abuse. Indeed these individuals were referred because of this behaviour. It was hypothesised that a further subgroup that had been referred as victims would have subsequently become perpetrators. These two subgroups together constituted the group of victims who developed into perpetrators, referred to hence forth as Victim-Perpetrators. The remainder of the victims who would never develop this behaviour will be known simply as Victims.

Fig. 6.4 The abuse/perpetration status of the sample at date of referral to GOS

<table>
<thead>
<tr>
<th>Birth</th>
<th>Date of GOS referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim Perpetrators at time of referral</td>
<td>Onset of perpetration</td>
</tr>
<tr>
<td>Victimisation</td>
<td></td>
</tr>
<tr>
<td>Victims who became perpetrators post referral</td>
<td>Onset of perpetration</td>
</tr>
<tr>
<td>Victimisation</td>
<td></td>
</tr>
<tr>
<td>Victims</td>
<td>Victimisation</td>
</tr>
</tbody>
</table>
6.5.2.4 Trawling and coding of clinical and social service files

The trawling of clinical files took place in the Behavioural Sciences Unit, Institute of Child Health. The trawling of social services files usually took place in the social service office at which the file had been located. In some cases, files held at several offices that were all part of the same department were moved to one central office. The files were trawled by one of five researchers, including the author. All were trained in using the Trawling and Coding Manual and Computerised Trawling Program, and had demonstrated reliability in trawling (see Appendix 1).

The coding of information extracted from clinical and social service files was made according to criteria in the Trawling and Coding Manual. For all subjects, information was coded on their sexual victimisation, their sexual perpetration, and on the risk and protective factors they had been exposed to.

It was clearly important to ensure that the researchers were not influenced in their coding of the risk and protective factors by knowledge of whether the subject had sexually perpetrated. If particular subjects were known to be perpetrators, the coders might be inclined to rate their risk scores as high and their protection scores as low in situations where there was some ambiguity. Alternatively, if the researchers were aware of the subjects’ risk and protection scores, this may influence their coding of the subjects’ perpetrator status (i.e. whether they were a perpetrator) in ambiguous situations. Both of these potential biases would skew the risk and protection scores in favour of the hypotheses, and this would limit the faith that could be placed in any findings.

This potential problem was dealt with by splitting up the tasks in two ways. Firstly, for each subject, the trawling process was performed by a different researcher (the trawler) than that who performed the coding process. Secondly, the coding of each subject’s data was actually split between two researchers, one of whom would code whether the subject had perpetrated sexual abuse (the perpetrator coder) whilst the other, who remained blind to the perpetration coding, would code his risk and
protection scores (the risk and protection coder). Neither of these two coders would have originally extracted the information from the social service and clinical files.

Once the trawler had read all the files and extracted relevant quotes, some additional tasks had to be completed to minimise the possibility that either coder would accidentally find out the perpetrator status of the subject. Firstly, it was necessary to ensure that all quotes had been tagged for the correct risk and protective factors. Secondly, if a quote that had been tagged for one factor (e.g. receiving treatment) also gave away the perpetrator status of the subject, the trawler had to split this into two quotes. The first quote would provide the relevant information about the treatment received and would be tagged only for this factor. Any data about the subject’s perpetrating behaviour would be cut out and would constitute the second quote, which would be tagged only for ‘perpetrator status’. The trawler had to ensure that no information necessary for either coder was lost in this process.

A third task for the trawler was to provide a ‘cut-off’ date for the risk and protection coder. Any quote written after this date was to be ignored when coding decisions were being made. In the case of subjects who became perpetrators, the ‘cut-off’ was either the date of their first recorded perpetrating behaviour or their sixteenth birthday, whichever came earliest. In the case of subjects who did not become perpetrators, it was their sixteenth birthday.

The cut-off date was created to ensure that no event could be considered to be a risk or protective factor if it occurred after the subject had already begun perpetrating. In addition, the date of the sixteenth birthday was chosen so that if no perpetration had occurred by then, there would be at least a degree of homogeneity in the range of years over which data were used for coding.

However, a possible source of bias was identified in relation to this cut-off date. If a coder noticed that the assigned cut-off date was also the subject’s sixteenth birthday, he/she could, on the balance of probabilities, conclude that the subject was not a
perpetrator. Conversely, if the cut-off was not the subject's sixteenth birthday it could be assumed that it represented the subject's first perpetration and that therefore the subject was a perpetrator. This might have led the risk and protection coder to make decisions that supported the hypotheses.

For this reason, a double coding system was adopted. The risk and protection coder was given two cut-off dates, one genuine and the other a distracter date, and was required to make two sets of codings blind to the status of both dates. The coding set used in the final data analysis was the one made using the genuine cut-off date.

The distracter date was assigned using a relatively complicated method, which varied according to the ultimate perpetrator status of the subject, the date of first perpetration and the length of the file. This is perhaps most clearly depicted in Figure 6.5 below.

Most of the dates could be ascertained from information within the files. The only necessary calculation was when a randomly generated date was required as a distracter. In this situation, a number was randomly generated using the 'RandNum' software package, between 73 and 191. This number represented the age of the subject in months on the day of the randomly generated distracter date. This age could not be less than six years and 1 month (73 months), since the subject could not be a perpetrator under this age. The random number was divided by 12 to turn it into years and months. For example, if the random number was 170, representing 170 months, this would be divided by 12 to give 14 years and 2 months. The month and year of the random distracter date would therefore be calculated by adding 14 years and 2 months to the subject's birthday. The actual day of the month was arrived at by randomly generating another number between 1 and 28, 29, 30 or 31 depending on the month in question.
Figure 6.5 Process for assigning cut-off dates

Is the subject a perpetrator of sexual abuse?

Yes

Did he start perpetrating before his 16th birthday?

No

Did the file end before his 16th birthday?

No

Yes

Did the file finish before his 16th birthday?

Yes

GCOD - end of file + 1 day
DCOD - 16th b’day

No

GCOD - date of file end + 1 day
DCOD - 16th b’day

No

GCOD - 16th b’day
DCOD - Randomly generated date

Key:

GCOD: Genuine cut-off date
DCOD: Distracter cut-off date
Finally, the trawler also ensured that the first quote that a coder could see when opening the computer system was not to do with the subject’s perpetration status.

6.5.3 Process 3: Establishing the outcome

6.5.3.1 Introduction
The principle outcome that needed to be established was the perpetration status of each subject. For the perpetrator coder to classify a subject as a perpetrator of sexual abuse, the subject’s behaviour would have to have met the criteria set out in the Trawling and Coding Manual (see Appendix 2). The subject’s behaviour was identified from two possible sources: quotes extracted from his contemporaneous files relating to sexually abusive behaviour; or the subject’s criminal record. The process of extracting and preparing quotes for coding has already been described in detail above (see Sections 6.5.1 and 6.5.2). The procedure employed to obtain the subjects’ criminal records will be described below.

The criteria for perpetrator status will then be outlined, and this will be followed by a description of the procedure adopted by the perpetrator coder to classify each subject. The criteria differed depending on the data source used. Those for extracted quotes will be summarised first followed by those for criminal records.

6.5.3.2 Procedure for obtaining criminal records
At the outset of this study, it was envisaged that the main, and certainly the most objective source of data about sexual abuse perpetration was likely to be police caution and conviction records. The procedure adopted to obtain these two types of data was slightly different.
6.5.3.2.1 Convictions

A conviction is given if an individual is found guilty of a crime in either a Magistrates Court or a Crown Court. Convictions for sexual offences remain permanently on an individual's criminal record. Therefore if a subject had a conviction for a sexual offence it would be picked up by a check of the Police National Computer (PNC). The PNC is a national database of all convictions. It gives details of when crimes were committed and the date of court convictions.

As this is a national system, a check of the PNC could be performed equally well for the complete sample by any police force willing to provide this information. Therefore having gained the backing of the Child Abuse Crime Committee of the Association of Chief Police Officers (A.C.P.O.), the Metropolitan Police were approached for access to this information. They agreed to provide the material provided a research contract was signed.

However, for accurate matches to be made between the study sample and individuals on the PNC, detailed information about the subjects was requested. As well as the subjects' name and date of birth, this included their place of birth, mother's maiden name and any other identifying information that could be obtained. The way this was obtained is described in Section 6.5.3.2.3 below.

6.5.3.2.2 Cautions

A more valid assessment of any criminal outcome must include information about any cautions that subjects may have received. Cautions are given by a police force to an individual who has committed a crime, rather than by a court. The evidence held by the police about the particular crime must be sufficient to allow the case to be taken to court if necessary. However, a caution is given if, for various possible reasons, the police decide it is a more appropriate course of action. For example, the individual may have committed a fairly minor first offence, or may be very young.
If the police give a caution it does not constitute a finding of guilt, but it is recorded on a person’s criminal record. Cautions, even for sexual offences, do not remain permanently on an individual’s criminal record, but expire after a certain date. This date varies between forces. Until April 1996, the Metropolitan Police kept caution records for three years or until the individual turned 18 years old, whichever came latest. Since then, caution records have been kept by this force for five years or until the individual turned 18 years old, whichever came latest. In other forces, caution records are simply kept for five years. For individuals over the age of 18 years, the maximum life of a caution appears to be five years but some forces are more ‘efficient’ than others at removing expired cautions from their system. In addition, caution records are not generally held on a national system, but by the local force that handed out the caution.

To obtain a comprehensive list of the cautions for sexual offences held by each subject, it was therefore necessary to search the databases of the police forces in the regions where the subject had lived in the past five years. The information about a subject’s location was obtained from the database of the Office for National Statistics (ONS).

For a study to gain access to these valuable data, ethical approval must first be sought from the ONS Research Ethics Committee. Once this has been obtained, the ONS attempt to establish the NHS number of every subject in the sample, and using this they can track the subject’s movements by identifying each Health Authority in which the subject has been registered with a GP. Thus they are able to provide information on a subject’s current location as well as any changes in area made in the last five years.

However, in order to ensure accurate matching of NHS numbers to subjects the ONS require considerable identifying information to be provided. This information was gathered as described in Section 6.5.3.2.3 below.
6.5.3.2.3 Subject matching information

It can be seen, therefore, that the accuracy of both caution and conviction data was dependent on the amount of identifying information for each of the subjects. A certain amount of identifying information was usually available from the GOSH clinical files. However, on occasions basic information such as a subject's date of birth was not stated in these files. This and additional useful information, such as the subject's place of birth or mother's maiden name, was therefore obtained from the Register ofBirths in England and Wales held at The Family Records Centre, London.

For each person born in England and Wales, the Register ofBirths actually records the quarter-year when their birth was registered rather than their date of birth. Each volume of the Register contains the births registered in a single three-month period: January to March; April to June; July to September and October to December. The entries are ordered alphabetically by last name and include details of all the person's other names, their place of birth and their mother's maiden name.

For subjects whose date of birth was known, a search was first made in the three-month band in which it was known they had been born and if no name match was made, the next three-month band was searched. If only one name matched, then this was considered to be a correct match, and the information was extracted.

For many of the subjects, the appropriate volume of the register recorded more than one individual with the name being searched for. In these cases, it was clearly necessary to identify the individual who had been a patient at Great Ormond Street Hospital by some other means. The most promising data item available was the mother's maiden name. If the former patient had had any siblings, it was likely that he and they would have had the same mother, even if their fathers were different men. If a clear match could be made on the Register for at least one of these siblings, the mother's maiden name could be identified. This could then be used to single out the one individual who was the subject from the others who shared his name.
It was therefore necessary to return to the subject’s Great Ormond Street file to search for the names and dates of birth of siblings who shared the same mother. If the names of siblings were found together with their dates of birth in the clinical file, an attempt was then made to find them in the Register.

Sometimes siblings’ dates of birth were not indicated in the subject’s clinical file. However their age was invariably given instead and so using this and the date of the document, an estimate could be made as to which volumes of the Register to look through to establish their mother’s maiden name. If a correct match was not made after this, or the subject did not have a sibling, then the search stopped.

Of the 350 subjects who were searched in the Register, correct matches were made for 273 (78%). No match was made for 77 (22%) of the subjects. There are four likely reasons for this: the subject may be registered with a health authority under a different last name to that recorded in his clinical file; the date of birth in his GOSH clinical file is incorrect; the subject’s parents never registered his birth; or the subject was born outside England and Wales and so his birth would not be recorded in the Register.

It should be added, though, that failure to make a match with the Register was not a reason to exclude the subject from the ONS search. Whatever information was available on all 350 subjects was sent to the ONS whether or not it included his mother’s maiden name or place of birth.

As described above, the database held by the ONS was then used to identify the health authorities in which the subject had lived over the previous five years. These were identified for 94% of the subjects (328/350). This information was then used to establish which police constabularies to approach for the subject’s cautions records over this period. For those subjects whose health authorities the ONS failed to find, the constabularies in which caution records were eventually searched were identified on the basis of the following: information contained in the clinical files; ONS
information for any siblings; or the social service department in which the subject’s file had been located.

The police forces covering the regions in which subjects had lived were contacted and asked to take part in the study. When this was done, the ultimate sample status of many of the subjects was not known. Therefore caution searches were attempted for all 350 subjects for whom a social service file had been located. The initial approach was made to the Chief Constable of the police force. Of the 42 police forces approached, 38 were in England and there were two each in Wales and Scotland. 41 (98%) agreed to take part in the study.

The participating forces were then sent details of those subjects who had at some time been registered with a GP in their area. Caution records searches were then carried out by the police and data about all cautions relating to these subjects were subsequently released. Each force needed to be satisfied that the caution records they released related to the subjects in the sample, rather than other individuals with similar names. The criteria used by the police for this purpose was decided by them, although if there was any doubt about the record sent by the police with respect to subject matching, the record was ignored for coding purposes.

6.5.3.3 Coding of perpetrator status

6.5.3.3.1 Criteria for coding perpetrator status based on extracted quotes

To avoid an over-simplistic definition to a complex behaviour, it was necessary to define perpetration in different ways depending on the age of the subject. This approach was based on the work of Pithers and colleagues (Pithers, Gray, Busconi & Houchens, 1998) who had defined normal and abnormal sexual behaviour in different ways for children of varying ages. Therefore two different sets of criteria were applied by the perpetrator coder depending on whether the subject was aged between 6 and 11 years old, or 12 years and above at the time he carried out the behaviour.
mentioned in the quote. (These criteria are summarised below but for full details, please refer to Appendix 2).

It was thought inappropriate to consider any sexualised behaviour by a subject aged between 1 and 5 years as constituting perpetration of sexual abuse.

6.5.3.3.1.1 Subjects aged 6-11 years:
A subject aged six to 11 years was coded a perpetrator of sexual abuse if a quote indicating any one of three types of behaviour was found by the perpetrator coder. First, the subject may have fondled the unclothed, or partially unclothed genitals of an individual on more than two occasions. The individual must have been either two years younger than the subject or force must have been used. Second, the subject may have performed a penetrative sexual act on an individual provided either that the individual was two years younger than the subject or that force was used. Third, there may be a quote by a psychological health care professional or a social worker that the subject had sexually abused an individual in an unspecified way.

6.5.3.3.1.2 Subjects aged 12 and over:
For subjects aged 12 and over, there were two different sets of criteria for being coded a perpetrator, which were applied depending on the age of the victim(s). If the victim was under 16 years, there must have been some form of sexual contact between victim and perpetrator (e.g. genital fondling through clothes, penetration), with the subject either being two or more years older than the victim or using force or threats with a weapon.

If the victim was 16 years or over, there must have been some form of sexual contact between victim and perpetrator, with the subject either using force or threats with a weapon.
6.5.3.3.2 Criteria for coding perpetrator status based on criminal records
If the subject’s criminal record indicated that he had received either a caution or a conviction for a sexual offence, that subject would be classified as a perpetrator of sexual abuse. Details of those offences categorised as sexual offences by the criminal justice system of England and Wales are given in Appendix 2.

6.5.3.3.3 Procedures for coding perpetrators of sexual abuse
The procedures used by the perpetrator coder to classify subjects as perpetrators or non-perpetrators differed depending on the age of the subject. Younger perpetrators (aged 6 to 11 years) were only identified from extracted quotes, whereas older perpetrators could be identified from extracted quotes or their criminal records. The different procedures are described below.

6.5.3.3.3.1 Subjects aged 6-11 years:
For the purpose of identifying whether a subject had perpetrated sexual abuse aged between six and 11 years, the perpetrator coder only used data that had been extracted in the form of quotes from that subject’s contemporaneous files. If the coder found evidence from these quotes that the subject’s behaviour met the criteria stated in Section 6.5.3.3.1.1 above, he would be coded as a perpetrator.

6.5.3.3.3.2 Subjects aged 12 years and over:
Two main sources of information were used to identify sexual abuse perpetration by a subject aged 12 years or over. First, the perpetrator coder would read the quotes, that had been extracted in the manner described above, from that subject’s files. If there was evidence that his behaviour met the criteria for perpetration stated in Section 6.5.3.3.1.2, the subject would be classified as a perpetrator.

Second, the subject’s criminal record would be read. If it was clear that the subject had been cautioned or convicted for a sexual offence, he would be classified as a perpetrator.
The data relating to the putative risk and protective variables, as well as the outcome variable, were recorded on paper coding sheets. These were then entered onto a database using the SPSS software package. The data were then cleaned and prepared for analysis.
Chapter 7 Results

7.1 Introduction to Results

In this chapter, the results from the analysis of the data will be presented. First, a summary of the demographic characteristics of the sample will given in Table 7.1. Issues relating to the control of certain variables will then be discussed. This will be followed by a descriptive analysis of the perpetrating behaviours of certain subjects, including their severity and duration. The analysis of risk factor data will then be described, and Hypothesis 1 will be addressed. Finally, the full analysis of the protective factor data will be presented, including Hypothesis 2.

7.2 Demographic Variables

7.2.1 Summary of sample demographics

A summary of the univariate socio-demographic characteristics of the sample is given in Table 7.1. A number of these variables were detailed in Chapter 6 (see Section 6.4) but this summary is provided for ease of reference. In addition, means are given for the whole sample as well as for the two groups, the victim-perpetrators and the victims-only.

As can be seen, the two groups have similar values most of the variables. The ages of the groups are not significantly different, but could be said to approach significance (p = .12). Similarly, the differences in the groups' region of abode at the time of their referral approaches significance (p = .13). This indicated that the victim-perpetrator group had more subjects from outside the south-east of England. This is probably due to the fact that the GOSH clinic would receive what the regional referrers considered some of their most difficult cases. These often involved individuals who had started offending against others. Hence the victim-perpetrator group was more likely to be over-represented with persons living far from London.
Table 7.1 Socio-demographic characteristics of the sample

<table>
<thead>
<tr>
<th>Factor</th>
<th>Whole sample</th>
<th>Victim-only group</th>
<th>Victim-perpetrator group</th>
<th>Significance of V-only vs. V-P group difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>22.04 (s.d. 3.20)</td>
<td>21.73 (s.d. 2.81)</td>
<td>23.29 (s.d. 4.28)</td>
<td>t = 1.59, p = .12</td>
</tr>
<tr>
<td>Age at referral</td>
<td>10.69 (s.d. 3.12)</td>
<td>10.68 (s.d. 3.00)</td>
<td>10.74 (s.d. 3.69)</td>
<td>t = .075, p = .94</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>59 (86.8%)</td>
<td>42 (84.0%)</td>
<td>17 (94.4%)</td>
<td>$\chi^2 = 1.26$, df = 1, p = .26</td>
</tr>
<tr>
<td>Other</td>
<td>9 (13.2%)</td>
<td>8 (16.0%)</td>
<td>1 (5.6%)</td>
<td></td>
</tr>
<tr>
<td>Missing cases</td>
<td>36</td>
<td>33</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Abode at referral</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With family</td>
<td>63 (63.0%)</td>
<td>52 (64.2%)</td>
<td>11 (57.9%)</td>
<td>$\chi^2 = .26$, df = 1, p = .61</td>
</tr>
<tr>
<td>Children's Home</td>
<td>20 (20.0%)</td>
<td>15 (18.5%)</td>
<td>5 (26.3%)</td>
<td>(collapsed to with family or other)</td>
</tr>
<tr>
<td>Foster Home</td>
<td>17 (17%)</td>
<td>14 (17.3%)</td>
<td>3 (15.8%)</td>
<td></td>
</tr>
<tr>
<td>Missing cases</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Region of abode</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater London</td>
<td>39 (37.5%)</td>
<td>31 (37.3%)</td>
<td>8 (38.1%)</td>
<td>$\chi^2 = 4.04$, df = 2, p = .13</td>
</tr>
<tr>
<td>Home counties</td>
<td>49 (47.1%)</td>
<td>42 (50.6%)</td>
<td>7 (33.1%)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>16 (15.4%)</td>
<td>10 (12.0%)</td>
<td>6 (28.6%)</td>
<td></td>
</tr>
<tr>
<td>Referral source</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social services</td>
<td>80 (77.7%)</td>
<td>65 (79.3%)</td>
<td>15 (71.4%)</td>
<td>$\chi^2 = .59$, df = 1, p = .44</td>
</tr>
<tr>
<td>Parent</td>
<td>9 (8.7%)</td>
<td>5 (6.1%)</td>
<td>4 (19.0%)</td>
<td>(collapsed to social services or other)</td>
</tr>
<tr>
<td>Health professional</td>
<td>12 (11.7%)</td>
<td>10 (12.2%)</td>
<td>2 (9.6%)</td>
<td></td>
</tr>
<tr>
<td>Guardian ad litem</td>
<td>2 (1.9%)</td>
<td>2 (2.4%)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Missing cases</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Reason for Referral</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim of sex abuse</td>
<td>85 (89.5%)</td>
<td>72 (93.5%)</td>
<td>13 (72.2%)</td>
<td>$\chi^2 = 7.02$, df = 1, p = .008</td>
</tr>
<tr>
<td>Perpetrator of s.a.</td>
<td>4 (4.2%)</td>
<td>1 (1.3%)</td>
<td>3 (16.7%)</td>
<td>(collapsed to victim of s.a. or other)</td>
</tr>
<tr>
<td>Mental health</td>
<td>5 (5.3%)</td>
<td>3 (3.9%)</td>
<td>2 (11.1%)</td>
<td></td>
</tr>
<tr>
<td>Physical health</td>
<td>1 (1.1%)</td>
<td>1 (1.2%)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Missing cases</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

The one factor for which there was a significant difference between the groups was the reason for referral (p = .008) with the victim-perpetrator group having a higher proportion of subjects referred for reasons other than being sexually victimised. This was obviously due to the number of subjects who had already started perpetrating and for whom contemporary evidence of their victimisation was later established.

One anomaly worth explaining is the victim-only group member who was referred for their perpetrating behaviour. Although this behaviour was alluded to in the initial referral letter, this suggestion was subsequently discredited.
7.2.2 Data sources

As described above (see Section 6.3.3), data on both risk and protective variables were extracted from clinical and social services files. The mean duration of the clinical files, i.e. the length of time between the date of the earliest document in the file and that of the latest, was 1.49 years (range 0.0 to 9.58 years). This was not significantly different for the victim-perpetrator and the victim-only groups \((t = 1.54, df=23^*, p > .05)\). The mean duration of the social service files was 10.48 years (range 0.42 to 39.58 years). The duration of these files was significantly longer for the victim-perpetrator group (mean = 15.7 years) than for the victim-only group (mean = 9.2 years; \(t = 4.25, df = 102, p < .001\)). This might suggest that any differences between the two groups could be attributable simply to the duration of the file rather than any real differences in the life experiences of the group members. It is possible that if the files had covered the same duration of time, there would have been no differences between the two groups.

However, the length of the individual social service files is not the best indicator of the time span over which the subject might accumulate risk and protective experiences, as coded in this study. It would be more appropriate to measure the length of time between each subject’s date of birth and the ‘cut-off’ date assigned to him (see Section 6.5.2.4).

The reason is that even though a social service file might have started when the subject was aged six, the social worker writing the file would still have been able to collect information about the subject’s life from the period between his birth up until he was six. Thus the start date of this time span should always be the subject’s date of birth, not the start date of the file. With regards to the end date, the date of the last quote about risk or protection available to the author, using the methodology adopted in this study, would be the end date of the file, the day before the subject’s sixteenth birthday or the day before he started perpetrating, whichever came sooner. This equates to the cut-off date assigned to a victim-perpetrator subject, as mentioned in Chapter 6 (see Section 6.5.2.4). Alternatively, in the case of a subject in the victim-
only group, this would be the earlier of the day before his sixteenth birthday and the last day of the file.

This time span therefore represents the maximum time over which the subject might accumulate risk and protective experiences, as potentially reported in the files. The mean duration of this time for the whole sample was 14.57 years (range between 6.33 and 16.0 years). This was significantly different between the victim-perpetrator group (13.0 years) and the victim-only group (14.97 years) \((t = 3.78, \text{df} = 102, p < .001)\). However the difference was in a direction that would have worked against the first hypothesis (see Section 6.2). The means indicate that the victim-only group would have had longer to build up information about risk than the victim-perpetrators. Thus if a difference was found that indicated the victim-perpetrators experienced significantly more risk than the victim-only group, this would make the finding all the more salient.

With regards to the second hypothesis (see Section 6.2), one might suppose that the difference found above would act in the direction of this hypothesis. Thus, the victim-only group would have more time to accumulate reports about putative protective experiences than the victim-perpetrators, and therefore any significant differences between the two groups' experience of the 'protective factors' would simply be an artefact of this difference in time span. These factors may have played no real protective role in the outcome at all.

However, there is some uncertainty as to the implications of this group difference in available time for the recording of information. This is due to the nature of the protective factors that make up the protective index, as many of them are based on the quality of the relationships the subject has built up in his life. It is known that the mean age at the cut-off date is 13 years for the victim-perpetrator group. The main argument for controlling for the 'time from date of birth to cut-off date' variable is if the victim-only group were likely to have experienced further protective factors after the age of 13 years. However, it seems likely that many of the relationships that are significant to the subject will have been in place prior to this age, e.g. relationships

* Levene's test for equality of variances revealed significant group differences in the variance.
with siblings. In addition, two of the variables that make up the protective index specifically relate to relationships that existed prior to the subject’s 12th birthday. Thus, any differences in these variables between the two groups are unlikely to be explained by the discrepancy in the time from the subjects’ dates of birth to their cut-off dates that exists between the groups. There is therefore some doubt about whether to control for this variable in the regression analysis.

It is generally appropriate to adopt a conservative approach during analysis to avoid Type 1 errors, i.e. to avoid attributing significance to a non-significant finding. This would imply controlling for this factor when attempting to identify protective factors. However there are some circumstances when it is even more important to avoid Type 2 errors, that is failing to identify significant results. Given the complete lack of research to identify protective factors against the development of sexually abusive behaviour and the rarity of the current sample, it may be appropriate to risk Type 1 errors in this case.

7.3 Perpetration outcomes

It was established from the various sources of data (described in Section 6.5.3) that 21 of the 104 subjects had perpetrated some form of sexual abuse against at least one child following their own sexual victimisation. (The criteria for coding sexual abuse are given in Section 6.5.3.3).

7.3.1 Severity of act

With regards to the severity of the sexual abuse, eleven (52.4%) of the perpetrators had committed a penetrative act on at least one victim; four (19%) had fondled the genitals of their victims, whilst for six (28.6%) their abuse had involved some kind of non-genital sexual contact with a victim, including fondling of buttocks and kissing.

Adjusted degrees of freedom have therefore been reported.
7.3.2 Victim details

The mean number of victims per perpetrator was 1.8 victims. Seven (33.3%) of the subjects had abused more than one victim with the highest number of victims for any one perpetrator being eight. One third of the perpetrators had abused only male children, with 6 (28.6%) abusing females only and a further 7 (33.3%) abusing both males and females. The gender of the victim of one of the perpetrators was not established.

With regards to the nature of the relationship of the perpetrators to their victims, eight (38.1%) of them were intrafamilial abusers. A further 10 (47.6%) perpetrators only abused outside the family, whilst 2 had both intrafamilial and extrafamilial victims. The relationship of one perpetrator to his victim was not established.

All of the perpetrators had sexually abused children whilst three had also abused adults (18 years or over). At the time of their abuse, the victims ranged in age from one and a half years to 26 years old. The age of each perpetrator’s youngest and oldest victims was also analysed: the mean age (in decimal years) of the youngest victims was 6.91 years whilst the mean age of the oldest victims was 9.71 years.

7.3.3 Perpetrator details

The mean age (decimal years) of the perpetrators at the earliest known occurrence of their sexually abusive behaviour was 13.1 years (s.d. = 2.26, range = 8.5 to 16.83 years). Their mean age at the last known occurrence was 14.23 years (s.d. = 3.36, range = 8.5 to 21.75 years). There was no significant difference between the mean age of the perpetrators when they abused their youngest victim (mean = 13.43 years, s.d. = 2.72, range = 8.5 to 18.5 years) and their mean age when they abused their oldest victim (mean = 13.83 years, s.d. = 2.65, range = 8.5 to 18.08 years) (z = -1.54, p = .123).
7.3.4 Duration of perpetrating behaviour

Eleven (52.4%) of the perpetrators were reported as committing one-off abusive acts, whilst the remainder abused over a longer period. The mean duration (decimal years) of the subjects’ perpetrating behaviour including the one-off abusers was 1.13 years (s.d. = 2.31, range = 0.0 to 7.67 years). For those perpetrators who abused on more than one occasion, the mean duration of their abusive behaviour was 2.37 years (s.d. = 2.94, range = 0.0 to 7.67 years).

7.4 Risk factors

This section summarises the results that relate to the identification of risk factors for sexual perpetration, culminating in a test of Hypothesis 1.

7.4.1 Bivariate analysis of risk factors

The putative risk factors that were analysed in the course of this study were included on the basis of a review of the literature and clinical observation. (For full definitions of these factors, refer to Appendix 2). It was appropriate, therefore, to establish the nature of the relationships between these variables and the perpetrating outcome. Odds ratios were used as an indication of the strength of these relationships, and were calculated by means of a logistic regression. If the lower confidence interval is greater than unity, the relationship can be interpreted as being significant.

Three of the factors had a significant relationship with the perpetrating outcome. These were sexual abuse by a female (OR = 3.03; 95% CI = 1.06 to 8.68), neglect — failure to provide (OR = 3.43; 95% CI = 1.21 to 9.72) and neglect — lack of supervision (OR = 3.03; 95% CI = 1.11 to 8.30). These results are summarised in Table 7.2 below.
Table 7.2: Size and proportions of groups who experienced risk factors and tests of between-group differences

<table>
<thead>
<tr>
<th>Maltreatment subtype</th>
<th>Victim-only group No. (%) with subtype</th>
<th>Victim-perpetrator group No. (%) with subtype</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discontinuity of care</td>
<td>75 (90.4)</td>
<td>20 (95.2)</td>
<td>OR = 2.13; 95% CI = 0.25 to 17.98</td>
</tr>
<tr>
<td>Sexual abuse by a female</td>
<td>14 (16.9)</td>
<td>8 (38.1)</td>
<td>OR = 3.03; 95% CI = 1.06 to 8.68</td>
</tr>
<tr>
<td>Experiencing physical abuse</td>
<td>52 (62.7)</td>
<td>16 (76.2)</td>
<td>OR = 1.91; 95% CI = 0.64 to 5.72</td>
</tr>
<tr>
<td>Witnessing intrafamilial physical abuse</td>
<td>48 (57.8)</td>
<td>17 (81.0)</td>
<td>OR = 3.01; 95% CI = 0.96 to 10.02</td>
</tr>
<tr>
<td>Neglect – failure to provide</td>
<td>35 (42.2)</td>
<td>15 (71.4)</td>
<td>OR = 3.43; 95% CI = 1.21 to 9.72</td>
</tr>
<tr>
<td>Neglect – lack of supervision</td>
<td>33 (39.8)</td>
<td>14 (66.7)</td>
<td>OR = 3.03; 95% CI = 1.11 to 8.30</td>
</tr>
<tr>
<td>Rejection by carers</td>
<td>35 (42.2)</td>
<td>12 (57.1)</td>
<td>OR = 1.83; 95% CI = 0.69 to 4.81</td>
</tr>
</tbody>
</table>

7.4.2 Testing Hypothesis 1

Hypothesis 1: It was predicted that a risk index consisting of key experiential risk factors would discriminate between those sexually victimised males who went on to perpetrate sexually and those who did not do so.

A risk index was calculated comprising, for each subject, the summation of their scores on each of the seven dichotomous variables that appear in Table 7.2. This resulted in a risk index score of between 0 and 7 for each subject. The extent to which this index discriminated the group membership of the subjects was calculated by comparing the mean scores of the victim-only and victim-perpetrator groups. Having established by visual inspection that the scores were normally distributed, this was achieved using an independent samples t-test.
A statistically significant difference was found between the scores of the two groups \( t = 3.49, \text{df} = 102, p < .01 \), with the victim-perpetrator group experiencing more maltreatment of the subtypes included in the index (mean = 4.90, s.d. = 1.55) than the victim-only group (mean = 3.52, s.d. = 1.65). This provides support for hypothesis 1.

### 7.5 Protective factors

This section summarises the results that relate to the identification of protective factors against the development of sexual perpetration in otherwise at risk males, including the testing of Hypothesis 2 (see Section 7.5.4). For a full list of the factors whose protective qualities were being investigated and their definitions, please refer to Section 6.5.1.4.

The section will start with an analysis of the associations between the putative protective variables, followed by a presentation of their compensatory properties. Hypothesis 2, involving a protective index, will then be addressed, including a description of the statistical methods used in this section of the analysis. This will be followed by an assessment of the protective qualities of the individual factors.

#### 7.5.1 Associations between putative protective variables

Table 7.4 below indicates the extent to which the individual putative protective factors are associated with each other. There are five continuous variables, two of which have restricted ranges, and six dichotomous variables. For the purpose of the calculations in Table 7.4, the two continuous variables with restricted ranges were analysed as ordinal variables.

Table 7.3 below indicates the statistical procedures that were employed in the calculation of the relationships between these factors.
Table 7.3: Statistic calculated for associations between protective factors

<table>
<thead>
<tr>
<th>First variable</th>
<th>Second variable</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichotomous</td>
<td>Dichotomous</td>
<td>Phi coefficient</td>
</tr>
<tr>
<td>Dichotomous</td>
<td>Ordinal</td>
<td>Spearman's rho</td>
</tr>
<tr>
<td>Dichotomous</td>
<td>Continuous</td>
<td>Mann Whitney U, point biserial r for effect size</td>
</tr>
<tr>
<td>Ordinal</td>
<td>Ordinal</td>
<td>Spearman's rho</td>
</tr>
<tr>
<td>Ordinal</td>
<td>Continuous</td>
<td>Spearman's rho</td>
</tr>
<tr>
<td>Continuous</td>
<td>Continuous</td>
<td>Pearson's product moment coefficient</td>
</tr>
</tbody>
</table>

The significant correlations in Table 7.4 are highlighted by a grey background. The high number of significant associations between these putative protective factors indicates that it would be reasonable to combine a theoretically-based selection of the factors to form a meaningful protective index.
Table 7.4: Associations between putative protective factors

<table>
<thead>
<tr>
<th></th>
<th>Time in foster care</th>
<th>Time with same carer</th>
<th>No. of care units pre 12 yrs</th>
<th>Non-abusive male carers pre 12 yrs</th>
<th>Non-abusive female carers pre 12 yrs</th>
<th>Psych. assessment</th>
<th>Relationship with adult</th>
<th>Relationship with sibling</th>
<th>Relationship with peer</th>
<th>Positive response by carer</th>
<th>Perpetrator convicted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time in Foster care</td>
<td>r = .41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time with Same carer</td>
<td>r = .34</td>
<td>r = .64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of care units pre 12 yrs</td>
<td>r = .34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-abusive male carers pre 12 yrs</td>
<td>rho = .21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-abusive female carers pre 12 yrs</td>
<td>rho = .32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Assessment</td>
<td>U=815, Z=-2.3, p=.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship With adult</td>
<td>U=1135, Z=-.42, p=.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship With sibling</td>
<td>U=692, Z=-2.5, p=.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship With peer</td>
<td>U=682, Z=−0.87, p=38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Response by carer</td>
<td>U=835, Z=-3.04, p=0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perpetrator Convicted</td>
<td>U=719, Z=-0.20, p=.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correlations**

- rho = .08, p = .44
- rho = -.06, p = .54
- rho = -.06, p = .56
- rho = .43, p < .001
- rho = -.08, p = .44
- rho = .18, p = .07
- rho = -.06, p = .56
- rho = .43, p < .001
- rho = .18, p = .07
- rho = -.06, p = .56
- rho = -.10, p = .54
- rho = .18, p = .07
- rho = -.06, p = .56
- rho = -.10, p = .54
- rho = .18, p = .07
- rho = -.06, p = .56
- rho = -.10, p = .54
- rho = .18, p = .07
- rho = -.06, p = .56
- rho = -.10, p = .54
- rho = .18, p = .07
- rho = -.06, p = .56
- rho = -.10, p = .54
- rho = .18, p = .07
- rho = -.06, p = .56
- rho = -.10, p = .54
7.5.2 Compensatory Factors

It has been argued in the course of this thesis (see Section 4.2.2) that it is inappropriate to consider variables that simply correlate with a positive outcome (i.e. exert a main effect on the outcome) as 'protective factors'. However it may still be of interest to establish the extent to which the putative protective factors in this study do correlate with a non-perpetrating outcome. Such variables may be referred to as compensatory factors (Garmezy et al., 1984). The results of this analysis are given in Table 7.5 below.

It was found that only one of these variables correlated significantly with the outcome. The lower the number of care units the subjects experienced prior to their 12th birthdays, i.e. the more stable their care, the less likely they were to become perpetrators of sexual abuse.

Table 7.5: Bivariate analysis of putative protective factors

<table>
<thead>
<tr>
<th>Protective factor</th>
<th>Victim-only group</th>
<th>Victim-perpetrator group</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of years in non-abusive foster care (decimal years - mean scores)</td>
<td>1.32</td>
<td>1.02</td>
<td>Mann Whitney U = 848.5, $Z = -0.21$, $p = 0.84$</td>
</tr>
<tr>
<td>Longest period with the same carer (decimal years - mean scores)</td>
<td>10.27</td>
<td>9.58</td>
<td>Mann Whitney U = 783.5, $Z = -0.71$, $p = 0.48$</td>
</tr>
<tr>
<td>No. of care units before 12th birthday (mean scores)</td>
<td>4.65</td>
<td>6.19</td>
<td>$t = -2.06$, $df = 102$, $p = 0.04$</td>
</tr>
<tr>
<td>No. of male non-abusive primary carers by age 12 yrs (mean scores)</td>
<td>0.46</td>
<td>0.38</td>
<td>Mann Whitney U = 772.5, $Z = -0.93$, $p = 0.35$</td>
</tr>
<tr>
<td>No. of female non-abusive primary carers by age 12 yrs (mean scores)</td>
<td>0.52</td>
<td>0.38</td>
<td>Mann Whitney U = 744.5, $Z = -1.18$, $p = 0.24$</td>
</tr>
<tr>
<td>Treatment (% present)</td>
<td>66.7</td>
<td>72.3</td>
<td>OR = 0.77; 95% CI = 0.27 to 2.14</td>
</tr>
<tr>
<td>Good relationship with adult (% present)</td>
<td>33.3</td>
<td>32.5</td>
<td>OR = 1.04; 95% CI = 0.38 to 2.87</td>
</tr>
</tbody>
</table>
7.5.3 Number of non-abusive carers

The reason for including the number of non-abusive carers, rather than simply a binary measure of whether the subject has been exposed to any non-abusive carers, has been described above (see Section 6.5.1.4). However it was also stated that a potential problem exists with the variables defined this way (e.g. number of non-abusive male/female carers by age 12 years) as putative protective factors. This centres around the fact that the number of carers that a subject has been exposed to, even if they are non-abusive, is an index of the discontinuity of care he has endured. In other words, these variables might be better described as risk factors than as protective factors.

One way of examining this problem would be to assess the extent to which the two variables correlate with the risk factor ‘discontinuity of care’, with the risk index and with the outcome variable (perpetration status). It appears that neither the number of non-abusive male carers (Kendall’s tau = -.014, p = .88) nor female carers (Kendall’s tau = .005, p = .96) correlate with discontinuity of care. The concern that these factors are simply indexes of discontinuity is therefore not justified. It is also apparent from Table 7.5 above that neither of these factors predicts perpetration status and therefore are unlikely to constitute risk factors for sexually abusive behaviour. Finally, the factors were not associated with the risk index as a whole, (no. of male carers: U = 772.5, z = -.93, p = .35; no. of female carers: U = 744.5, z = -1.18, p = .24) providing additional refutation that they carry significant risk related properties. It seems justifiable, therefore, to include these factors as putative protective factors.

<table>
<thead>
<tr>
<th></th>
<th>Present</th>
<th>Non-present</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good relationship with sibling</td>
<td>28.6</td>
<td>22.9</td>
<td>1.35</td>
<td>0.46 to 3.95</td>
</tr>
<tr>
<td>Good relationship with peer</td>
<td>14.3</td>
<td>18.1</td>
<td>0.76</td>
<td>0.20 to 2.90</td>
</tr>
<tr>
<td>Positive response to disclosure by carer</td>
<td>38.1</td>
<td>34.9</td>
<td>1.15</td>
<td>0.43 to 3.08</td>
</tr>
<tr>
<td>Perpetrator convicted</td>
<td>9.5</td>
<td>18.1</td>
<td>0.48</td>
<td>0.10 to 2.27</td>
</tr>
</tbody>
</table>
7.5.4 Testing Hypothesis 2

Hypothesis 2: A statistically significant interaction would be found between the risk index and a putative protective index. This would indicate that the factors making up the index served to protect against sexual perpetration in an otherwise at risk group.

Having established the efficacy of the risk index in discriminating the victim-perpetrator from the victim-only group it was possible to establish whether the putative protective index (from now on referred to as the 'protective index') did in fact provide a protective role. This protective index consisted of the following variables: good relationship with an adult; good relationship with a sibling; good relationship with a peer; years spent in foster care; number of non abusive male carers by age 12; number of non abusive female carers by age 12; longest time the subject lived with the same carer; number of care units by age 12 (reverse scored). (For definitions and explanation of the construction of the index, see Section 6.5.1.4).

Given the dichotomous nature of the perpetration outcome, a logistic regression is generally regarded as the first statistical procedure to adopt in order to establish whether the risk and protective indices interacted significantly (Kessler, 1983). However, as was stated in Section 5.10, if no significant interaction is found in this way, this result on its own should not be relied upon. A linear regression approach should subsequently be adopted. Therefore, this was the procedure that was followed.

The protective index scores were calculated by summing the standardised scores of the eight variables that comprised the index. The reason for standardising the scores was that only three of the variables were dichotomous (good relationship with adult, peer and sibling) whilst the remainder were continuous variables. In order to maintain consistency, the risk index was also recalculated using standardised scores.
In the first block of a logistic regression, it is appropriate to control for any variables that might account for any variance in the outcome, other than the test variables. The mean times from the subjects’ dates of birth to their assigned cut-off dates (see Section 7.2.2) significantly differed for the perpetrators and the non-perpetrators. In addition, the difference between the perpetrators’ and the non-perpetrators’ mean ages on the 1st May 1999 had been found to approach significance (see Section 6.4). As this relationship was approaching significance, it was decided to include this as a control variable.

However, for the reasons outlined in Section 7.2.2, it was decided to run two sets of logistic regressions, in the first not controlling for any factors, and in the second controlling for ‘time from date of birth to cut-off’ and ‘age’. Briefly, the first regression was run to minimise the chances of a Type 2 error and because the ‘time from date of birth to cut-off’ variable was difficult to interpret. The second regression represented a more conservative approach. These two regressions were run first using the logistic technique and if neither of these produced a significant interaction, two further regressions were run using the linear technique.

In the regressions in which controls were included, the control variables were entered together in the first block. Otherwise the order of the subsequent allocation of variables to blocks was the same in all the regressions: the standardised risk index was entered in a single block followed by the protective index in the next block. Finally the interaction between the risk and protective indices was entered in the last block. The results of the two approaches are given in Tables 7.6.1 to 7.6.4 below. However, to summarise, none of the interaction terms accounted for significant amounts of variance in the perpetration outcome. This was the case whether the control variables were included or excluded, and whether logistic or linear regressions were run.
Table 7.6.1: Logistic Regression with risk index (RI) x protective index (PI)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2571</td>
<td>.0852</td>
<td>9.1154</td>
<td>1</td>
<td>.0025</td>
<td>.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>.2988</td>
<td>29.5313</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2686</td>
<td>.0892</td>
<td>9.0699</td>
<td>1</td>
<td>.0026</td>
<td>.2752</td>
<td>1.3082</td>
</tr>
<tr>
<td>Protective index</td>
<td>.1140</td>
<td>.0812</td>
<td>1.9705</td>
<td>1</td>
<td>.1604</td>
<td>.0000</td>
<td>.8923</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6894</td>
<td>.3150</td>
<td>28.7548</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2751</td>
<td>.0932</td>
<td>8.7118</td>
<td>1</td>
<td>.0032</td>
<td>.2712</td>
<td>1.3167</td>
</tr>
<tr>
<td>Protective index</td>
<td>-.2106</td>
<td>.1150</td>
<td>3.3540</td>
<td>1</td>
<td>.0670</td>
<td>-.1218</td>
<td>.8101</td>
</tr>
<tr>
<td>Risk x Prot.</td>
<td>.0363</td>
<td>.0285</td>
<td>1.6202</td>
<td>1</td>
<td>.2031</td>
<td>.0000</td>
<td>1.0369</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.7902</td>
<td>.3500</td>
<td>26.1561</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.6.2: Logistic Regression including RI x PI and control variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.3959</td>
<td>.1103</td>
<td>12.8781</td>
<td>1</td>
<td>.0003</td>
<td>-.3224</td>
<td>.6731</td>
</tr>
<tr>
<td>Age</td>
<td>.2070</td>
<td>.0814</td>
<td>6.4595</td>
<td>1</td>
<td>.0110</td>
<td>.2064</td>
<td>1.2300</td>
</tr>
<tr>
<td>Constant</td>
<td>-.4493</td>
<td>1.9996</td>
<td>.0505</td>
<td>1</td>
<td>.8222</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.5648</td>
<td>.1414</td>
<td>15.9614</td>
<td>1</td>
<td>.0001</td>
<td>-.4011</td>
<td>.5685</td>
</tr>
<tr>
<td>Age</td>
<td>.2348</td>
<td>.0910</td>
<td>6.6576</td>
<td>1</td>
<td>.0099</td>
<td>.2317</td>
<td>1.2647</td>
</tr>
<tr>
<td>Risk index</td>
<td>.3751</td>
<td>.1055</td>
<td>12.6494</td>
<td>1</td>
<td>.0004</td>
<td>.3503</td>
<td>1.4551</td>
</tr>
<tr>
<td>Constant</td>
<td>.8867</td>
<td>2.3192</td>
<td>.1462</td>
<td>1</td>
<td>.7022</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.5531</td>
<td>.1431</td>
<td>14.9504</td>
<td>1</td>
<td>.0001</td>
<td>-.4330</td>
<td>.5752</td>
</tr>
<tr>
<td>Age</td>
<td>.2296</td>
<td>.0917</td>
<td>6.2648</td>
<td>1</td>
<td>.0123</td>
<td>.2485</td>
<td>1.2581</td>
</tr>
<tr>
<td>Risk index</td>
<td>.3777</td>
<td>.1067</td>
<td>12.5340</td>
<td>1</td>
<td>.0004</td>
<td>.3905</td>
<td>1.4589</td>
</tr>
<tr>
<td>Protective index</td>
<td>-.0460</td>
<td>.0876</td>
<td>.2755</td>
<td>1</td>
<td>.5997</td>
<td>.0000</td>
<td>.9551</td>
</tr>
<tr>
<td>Constant</td>
<td>.8189</td>
<td>2.3416</td>
<td>.1223</td>
<td>1</td>
<td>.7265</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 4:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.5397</td>
<td>.1456</td>
<td>13.7456</td>
<td>1</td>
<td>.0002</td>
<td>-.4132</td>
<td>.5829</td>
</tr>
<tr>
<td>Age</td>
<td>.2332</td>
<td>.0906</td>
<td>6.6249</td>
<td>1</td>
<td>.0101</td>
<td>.2593</td>
<td>1.2626</td>
</tr>
<tr>
<td>Risk index</td>
<td>.3816</td>
<td>.1098</td>
<td>12.0727</td>
<td>1</td>
<td>.0005</td>
<td>.3826</td>
<td>1.4646</td>
</tr>
<tr>
<td>Protective index</td>
<td>-.1239</td>
<td>.1256</td>
<td>.9734</td>
<td>1</td>
<td>.3238</td>
<td>.0000</td>
<td>.8835</td>
</tr>
<tr>
<td>Risk x Prot.</td>
<td>.0281</td>
<td>.0310</td>
<td>.8197</td>
<td>1</td>
<td>.3653</td>
<td>.0000</td>
<td>1.0285</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.4721</td>
<td>2.3916</td>
<td>.0390</td>
<td>1</td>
<td>.8435</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 7.6.3: Linear Regression including RI x PI

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.316</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0343</td>
<td>.010</td>
<td>.313</td>
<td>3.326</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.328</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0334</td>
<td>.010</td>
<td>.305</td>
<td>3.242</td>
</tr>
<tr>
<td>Protective index</td>
<td>-.0147</td>
<td>.012</td>
<td>-.118</td>
<td>-1.252</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.202</td>
<td>.038</td>
<td>5.318</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0322</td>
<td>.011</td>
<td>.294</td>
<td>2.977</td>
</tr>
<tr>
<td>Protective index</td>
<td>-.0160</td>
<td>.012</td>
<td>-.128</td>
<td>-1.301</td>
</tr>
<tr>
<td>Risk x Prot. Interaction</td>
<td>-.0013</td>
<td>.003</td>
<td>.038</td>
<td>.374</td>
</tr>
</tbody>
</table>

### Table 7.6.4: Linear Regression including RI x PI and control variables

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.346</td>
<td>.272</td>
<td>-1.270</td>
<td>.207</td>
</tr>
<tr>
<td>Age</td>
<td>.0249</td>
<td>.012</td>
<td>.197</td>
<td>2.033</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.510</td>
<td>.324</td>
<td>1.573</td>
<td>.119</td>
</tr>
<tr>
<td>Age</td>
<td>.0309</td>
<td>.011</td>
<td>.245</td>
<td>2.702</td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.0679</td>
<td>.016</td>
<td>-.381</td>
<td>-4.200</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.569</td>
<td>.300</td>
<td>1.896</td>
<td>.061</td>
</tr>
<tr>
<td>Age</td>
<td>.0323</td>
<td>.011</td>
<td>.256</td>
<td>3.054</td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.0741</td>
<td>.015</td>
<td>-.416</td>
<td>-4.939</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0391</td>
<td>.009</td>
<td>.357</td>
<td>4.269</td>
</tr>
<tr>
<td>Model 4:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.555</td>
<td>.303</td>
<td>1.830</td>
<td>.070</td>
</tr>
<tr>
<td>Age</td>
<td>.0321</td>
<td>.011</td>
<td>.255</td>
<td>3.020</td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.0728</td>
<td>.015</td>
<td>-.409</td>
<td>-4.748</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0387</td>
<td>.009</td>
<td>.353</td>
<td>4.195</td>
</tr>
<tr>
<td>Protective index</td>
<td>-.0049</td>
<td>.011</td>
<td>-.039</td>
<td>-.459</td>
</tr>
<tr>
<td>Model 5:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.552</td>
<td>.311</td>
<td>1.774</td>
<td>.079</td>
</tr>
<tr>
<td>Age</td>
<td>.0321</td>
<td>.011</td>
<td>.255</td>
<td>2.985</td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.0727</td>
<td>.016</td>
<td>-.408</td>
<td>-4.659</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0386</td>
<td>.010</td>
<td>.353</td>
<td>3.957</td>
</tr>
<tr>
<td>Protective index</td>
<td>-.0050</td>
<td>.011</td>
<td>-.040</td>
<td>-.446</td>
</tr>
<tr>
<td>Risk x Prot. Interaction</td>
<td>.0001</td>
<td>.003</td>
<td>.003</td>
<td>.035</td>
</tr>
</tbody>
</table>

222
Table 7.6.1 shows that when the control variables were excluded from the logistic regression, the interaction between RI and PI did not account for any significant variance in outcome (p = .20). Predictably, therefore, when the control variables 'time from subject’s date of birth to the cut-off date' and 'age', were included, the interaction was also non-significant (p = .37) (see Table 7.6.2). When the linear regressions were run, the interaction term did not account for significant variance whether the controls were excluded (β = .04, p = .71) or included (β = .003, p = .97).

These results suggest that the 'protective index' of variables, as measured in this study, does not interact significantly with the risk index and does not therefore identify variables that are protective against the development of sexual abuse perpetration in the context of such risks.

7.5.5 Analysis of other putative protective variables

There remained a possibility that the inclusion of certain of the variables in the protective index might have masked the genuine protective effects of other component variables (see Section 5.10). To explore this possibility, a number of further regressions were run. In place of the whole protective index, each putative protective variable that had been a constituent of the index was standardised and then entered, one per regression. Initially, this was performed excluding the control variables. If the interaction approached significance (p=<.1), or was significant (p=<.05) a further regression was run including the control variables.

The results are summarised in Table 7.7, but given in full below that table. To briefly summarise however, in the logistic regressions only one of the interaction terms, 'longest period with the same carer', approached significance (p = .06). When the control variables were included, though, the interaction became non-significant (p = .37). None of the interactions in the linear regressions even approached significance.
Table 7.7: Significance of interactions between the risk index and the constituent factors in the protective index excluding control variables, using logistic and linear regressions.

<table>
<thead>
<tr>
<th>Putative protective factor</th>
<th>Logistic Regression: significance of interaction</th>
<th>Linear regression: standardised Beta weights, significance of interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of years in non-abusive foster care (decimal years)</td>
<td>p = .73</td>
<td>B = .01, p = .95</td>
</tr>
<tr>
<td>Longest period with the same carer (decimal years)</td>
<td>p = .06 (including controls, p = .37)</td>
<td>B = .36, p = .19</td>
</tr>
<tr>
<td>No. of care units before 12th birthday (reverse scored)</td>
<td>p = .33</td>
<td>B = .00, p = .97</td>
</tr>
<tr>
<td>No. of male non-abusive primary carers by age 12 yrs</td>
<td>p = .91</td>
<td>B = -.07, p = .48</td>
</tr>
<tr>
<td>No. of female non-abusive primary carers by age 12 yrs</td>
<td>p = .59</td>
<td>B = -.23, p = .83</td>
</tr>
<tr>
<td>Good relationship with adult</td>
<td>p = .82</td>
<td>B = -.01, p = .91</td>
</tr>
<tr>
<td>Good relationship with sibling</td>
<td>p = .83</td>
<td>B = .04, p = .67</td>
</tr>
<tr>
<td>Good relationship with peer</td>
<td>p = .49</td>
<td>B = .05, p = .65</td>
</tr>
</tbody>
</table>

Logistic regressions – full regression tables

Table 7.7.1: Logistic regression including RI x No. of years in non-abusive foster care

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2571</td>
<td>.0852</td>
<td>9.1154</td>
<td>1</td>
<td>.0025</td>
<td>.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>.2988</td>
<td>29.5313</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.3039</td>
<td>.0930</td>
<td>10.6754</td>
<td>1</td>
<td>.0011</td>
<td>.3049</td>
<td>1.3551</td>
</tr>
<tr>
<td>Years in foster care</td>
<td>-.5068</td>
<td>.3290</td>
<td>2.3730</td>
<td>1</td>
<td>.1235</td>
<td>-.0632</td>
<td>.6024</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6905</td>
<td>.3151</td>
<td>28.7767</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.3114</td>
<td>.0966</td>
<td>10.3911</td>
<td>1</td>
<td>.0013</td>
<td>.3046</td>
<td>1.3653</td>
</tr>
<tr>
<td>Years in foster care</td>
<td>-.6475</td>
<td>.5532</td>
<td>1.3698</td>
<td>1</td>
<td>.2418</td>
<td>.0000</td>
<td>.5234</td>
</tr>
<tr>
<td>Risk x Years in f. care</td>
<td>.0419</td>
<td>.1221</td>
<td>.1175</td>
<td>1</td>
<td>.7317</td>
<td>.0000</td>
<td>1.0428</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.7472</td>
<td>.3659</td>
<td>22.8010</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7.7.2: Logistic regression including RI x Longest period with the same carer

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2571</td>
<td>.0852</td>
<td>9.1154</td>
<td>1</td>
<td>.0025</td>
<td>.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>.2988</td>
<td>29.5313</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2883</td>
<td>.0940</td>
<td>9.4002</td>
<td>1</td>
<td>.0022</td>
<td>.2816</td>
<td>1.3342</td>
</tr>
<tr>
<td>Longest time with carer</td>
<td>.2486</td>
<td>.2978</td>
<td>.6968</td>
<td>1</td>
<td>.4038</td>
<td>.0000</td>
<td>1.2822</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6368</td>
<td>.3019</td>
<td>29.3931</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.3373</td>
<td>.1079</td>
<td>9.7710</td>
<td>1</td>
<td>.0018</td>
<td>.2896</td>
<td>1.4012</td>
</tr>
<tr>
<td>Longest time with carer</td>
<td>-.0562</td>
<td>.3283</td>
<td>.0293</td>
<td>1</td>
<td>.8640</td>
<td>.0000</td>
<td>.9453</td>
</tr>
<tr>
<td>Risk x time with carer</td>
<td>.2186</td>
<td>.1152</td>
<td>3.6017</td>
<td>1</td>
<td>.0577</td>
<td>.1315</td>
<td>1.2443</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.5417</td>
<td>.3247</td>
<td>22.5462</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The interaction between the risk index and ‘number of years with the same carer’ approached significance (p = .0577). Hence a further logistic regression was run including the control variables, to establish whether the interaction remained significant under these conditions.

Table 7.7.3: Logistic regression including RI x Longest period with same carer and control variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.3959</td>
<td>.1103</td>
<td>12.8781</td>
<td>1</td>
<td>.0003</td>
<td>-.3224</td>
<td>.6731</td>
</tr>
<tr>
<td>Age</td>
<td>.2070</td>
<td>.0814</td>
<td>6.4595</td>
<td>1</td>
<td>.0110</td>
<td>.2064</td>
<td>1.2300</td>
</tr>
<tr>
<td>Constant</td>
<td>-.4493</td>
<td>1.9996</td>
<td>.0505</td>
<td>1</td>
<td>.8222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.5648</td>
<td>.1414</td>
<td>15.9614</td>
<td>1</td>
<td>.0001</td>
<td>-.4011</td>
<td>.5685</td>
</tr>
<tr>
<td>Age</td>
<td>.2348</td>
<td>.0910</td>
<td>6.6576</td>
<td>1</td>
<td>.0099</td>
<td>.2317</td>
<td>1.2647</td>
</tr>
<tr>
<td>Risk index</td>
<td>.3751</td>
<td>.1055</td>
<td>12.6494</td>
<td>1</td>
<td>.0004</td>
<td>.3503</td>
<td>1.4551</td>
</tr>
<tr>
<td>Constant</td>
<td>.8867</td>
<td>2.3192</td>
<td>1.462</td>
<td>1</td>
<td>.7022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.8248</td>
<td>.1989</td>
<td>17.1876</td>
<td>1</td>
<td>.0000</td>
<td>-.4689</td>
<td>.4383</td>
</tr>
<tr>
<td>Age</td>
<td>.2408</td>
<td>.0976</td>
<td>6.0888</td>
<td>1</td>
<td>.0136</td>
<td>.2433</td>
<td>1.2722</td>
</tr>
<tr>
<td>Risk index</td>
<td>.5317</td>
<td>.1368</td>
<td>15.1007</td>
<td>1</td>
<td>.0001</td>
<td>.4355</td>
<td>1.7018</td>
</tr>
<tr>
<td>Longest time with carer</td>
<td>1.2046</td>
<td>.4833</td>
<td>6.2118</td>
<td>1</td>
<td>.0127</td>
<td>.2469</td>
<td>3.3355</td>
</tr>
<tr>
<td>Constant</td>
<td>4.3204</td>
<td>2.6321</td>
<td>2.3271</td>
<td>1</td>
<td>.1271</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.7837</td>
<td>.2121</td>
<td>13.6573</td>
<td>1</td>
<td>.0002</td>
<td>-.4365</td>
<td>.4567</td>
</tr>
<tr>
<td>Age</td>
<td>.2413</td>
<td>.0975</td>
<td>6.1266</td>
<td>1</td>
<td>.0133</td>
<td>.2597</td>
<td>1.2728</td>
</tr>
<tr>
<td>Risk index</td>
<td>.5323</td>
<td>.1369</td>
<td>15.1210</td>
<td>1</td>
<td>.0005</td>
<td>.3826</td>
<td>.4646</td>
</tr>
<tr>
<td>Longest time with carer</td>
<td>1.0584</td>
<td>.5628</td>
<td>3.5361</td>
<td>1</td>
<td>.3238</td>
<td>.0000</td>
<td>.8835</td>
</tr>
<tr>
<td>Risk x Time with carer</td>
<td>.0643</td>
<td>.1408</td>
<td>2.082</td>
<td>1</td>
<td>.3653</td>
<td>.0000</td>
<td>1.0285</td>
</tr>
<tr>
<td>Constant</td>
<td>3.7819</td>
<td>3.0158</td>
<td>1.5726</td>
<td>1</td>
<td>.4435</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7.7.4: Logistic regression including RI x Number of care units before 12th birthday

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2571</td>
<td>0.0852</td>
<td>9.1154</td>
<td>1</td>
<td>.0025</td>
<td>.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>0.2988</td>
<td>29.5313</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2377</td>
<td>0.0922</td>
<td>6.6457</td>
<td>1</td>
<td>.0099</td>
<td>.2231</td>
<td>1.2683</td>
</tr>
<tr>
<td>Care units pre 12</td>
<td>-0.1505</td>
<td>0.2789</td>
<td>2.913</td>
<td>1</td>
<td>.0584</td>
<td>.0000</td>
<td>.8602</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6326</td>
<td>0.3007</td>
<td>29.4715</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2518</td>
<td>0.0963</td>
<td>6.8349</td>
<td>1</td>
<td>.0089</td>
<td>.2279</td>
<td>1.2863</td>
</tr>
<tr>
<td>Care units pre 12</td>
<td>-0.2995</td>
<td>0.3113</td>
<td>0.9257</td>
<td>1</td>
<td>.3360</td>
<td>.0000</td>
<td>.7412</td>
</tr>
<tr>
<td>Risk x care units pre 12</td>
<td>0.0897</td>
<td>0.0926</td>
<td>0.9379</td>
<td>1</td>
<td>.3328</td>
<td>.0000</td>
<td>1.0938</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.5686</td>
<td>0.3157</td>
<td>24.6932</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.7.5: Logistic regression including RI x Number of male non-abusive primary carers before 12th birthday

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2571</td>
<td>0.0852</td>
<td>9.1154</td>
<td>1</td>
<td>.0025</td>
<td>.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>0.2988</td>
<td>29.5313</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2711</td>
<td>0.0888</td>
<td>9.3270</td>
<td>1</td>
<td>.0023</td>
<td>.2802</td>
<td>1.3114</td>
</tr>
<tr>
<td>Male carers pre 12</td>
<td>-0.2479</td>
<td>0.2814</td>
<td>0.7764</td>
<td>1</td>
<td>.3782</td>
<td>.0000</td>
<td>.7804</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6646</td>
<td>0.3090</td>
<td>29.0177</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2711</td>
<td>0.0884</td>
<td>9.3986</td>
<td>1</td>
<td>.0022</td>
<td>.2828</td>
<td>1.3114</td>
</tr>
<tr>
<td>Male carers pre 12</td>
<td>-0.2237</td>
<td>0.3513</td>
<td>0.4055</td>
<td>1</td>
<td>.5243</td>
<td>.0000</td>
<td>.7995</td>
</tr>
<tr>
<td>Risk x male carers pre 12</td>
<td>-0.0106</td>
<td>0.0952</td>
<td>0.0125</td>
<td>1</td>
<td>.9109</td>
<td>.0000</td>
<td>.9894</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6581</td>
<td>0.3123</td>
<td>28.1920</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7.7.6: Logistic regression including RI x No. of female non-abusive primary carers before 12th birthday

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2571</td>
<td>0.0852</td>
<td>9.1154</td>
<td>1</td>
<td>0.0025</td>
<td>1.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>0.2988</td>
<td>29.5313</td>
<td>1</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2697</td>
<td>0.0893</td>
<td>9.1299</td>
<td>1</td>
<td>0.0025</td>
<td>0.2764</td>
<td>1.3095</td>
</tr>
<tr>
<td>Female carers pre 12</td>
<td>-0.2635</td>
<td>0.2639</td>
<td>0.9972</td>
<td>1</td>
<td>0.3180</td>
<td>0.0000</td>
<td>0.7684</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6677</td>
<td>0.3110</td>
<td>28.7620</td>
<td>1</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2675</td>
<td>0.0915</td>
<td>8.5525</td>
<td>1</td>
<td>0.0035</td>
<td>0.2665</td>
<td>1.3066</td>
</tr>
<tr>
<td>Female carers pre 12</td>
<td>-0.4068</td>
<td>0.3875</td>
<td>1.1026</td>
<td>1</td>
<td>0.2937</td>
<td>0.0000</td>
<td>0.6657</td>
</tr>
<tr>
<td>Risk x female carers pre 12</td>
<td>0.0488</td>
<td>0.0905</td>
<td>2.903</td>
<td>1</td>
<td>0.0591</td>
<td>0.0000</td>
<td>1.0500</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.7008</td>
<td>0.3289</td>
<td>26.7400</td>
<td>1</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.7.7: Logistic regression including RI x Good relationship with adult

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2571</td>
<td>0.0852</td>
<td>9.1154</td>
<td>1</td>
<td>0.0025</td>
<td>1.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>0.2988</td>
<td>29.5313</td>
<td>1</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2667</td>
<td>0.0874</td>
<td>9.3114</td>
<td>1</td>
<td>0.0023</td>
<td>0.2799</td>
<td>1.3056</td>
</tr>
<tr>
<td>Good reln. with adult</td>
<td>-0.1513</td>
<td>0.2630</td>
<td>0.3309</td>
<td>1</td>
<td>0.5651</td>
<td>0.0000</td>
<td>0.8596</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6311</td>
<td>0.3009</td>
<td>29.3831</td>
<td>1</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>0.2677</td>
<td>0.0877</td>
<td>9.3211</td>
<td>1</td>
<td>0.0023</td>
<td>0.2806</td>
<td>1.3069</td>
</tr>
<tr>
<td>Good reln. with adult</td>
<td>-0.1089</td>
<td>0.3172</td>
<td>0.1180</td>
<td>1</td>
<td>0.7313</td>
<td>0.0000</td>
<td>0.8968</td>
</tr>
<tr>
<td>Risk x good adult reln.</td>
<td>-0.0195</td>
<td>0.0585</td>
<td>0.0522</td>
<td>1</td>
<td>0.8193</td>
<td>0.0000</td>
<td>0.9807</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6218</td>
<td>0.3030</td>
<td>28.6450</td>
<td>1</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Table 7.7.8: Logistic regression including RI x Good relationship with sibling**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2571</td>
<td>.0852</td>
<td>9.1154</td>
<td>1</td>
<td>.0025</td>
<td>.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>.2988</td>
<td>29.5313</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2630</td>
<td>.0879</td>
<td>8.9603</td>
<td>1</td>
<td>.0028</td>
<td>.2731</td>
<td>1.3009</td>
</tr>
<tr>
<td>Good reln. with sibling</td>
<td>-.0749</td>
<td>.2584</td>
<td>.0839</td>
<td>1</td>
<td>.7720</td>
<td>.0000</td>
<td>.9279</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6284</td>
<td>.3001</td>
<td>29.4362</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2626</td>
<td>.0878</td>
<td>8.9386</td>
<td>1</td>
<td>.0028</td>
<td>.2728</td>
<td>1.3003</td>
</tr>
<tr>
<td>Good reln. with sibling</td>
<td>-.1227</td>
<td>.3507</td>
<td>.1224</td>
<td>1</td>
<td>.7265</td>
<td>.0000</td>
<td>.8846</td>
</tr>
<tr>
<td>Risk x good sibling reln.</td>
<td>.0185</td>
<td>.0883</td>
<td>.0439</td>
<td>1</td>
<td>.8340</td>
<td>.0000</td>
<td>1.0187</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6412</td>
<td>.3072</td>
<td>28.5462</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 7.7.9: Logistic regression including RI x Good relationship with peer**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2571</td>
<td>.0852</td>
<td>9.1154</td>
<td>1</td>
<td>.0025</td>
<td>.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>.2988</td>
<td>29.5313</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2592</td>
<td>.0850</td>
<td>9.2961</td>
<td>1</td>
<td>.0023</td>
<td>.2796</td>
<td>1.2959</td>
</tr>
<tr>
<td>Good reln. with peer</td>
<td>-1.653</td>
<td>.2694</td>
<td>.3764</td>
<td>1</td>
<td>.5395</td>
<td>.0000</td>
<td>.8476</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6262</td>
<td>.2991</td>
<td>29.5554</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2753</td>
<td>.0900</td>
<td>9.3486</td>
<td>1</td>
<td>.0022</td>
<td>.2812</td>
<td>1.3169</td>
</tr>
<tr>
<td>Good reln. with peer</td>
<td>-3.649</td>
<td>.4265</td>
<td>.7322</td>
<td>1</td>
<td>.3922</td>
<td>.0000</td>
<td>.6943</td>
</tr>
<tr>
<td>Risk x good peer reln.</td>
<td>.0847</td>
<td>.1217</td>
<td>.4841</td>
<td>1</td>
<td>.4865</td>
<td>.0000</td>
<td>1.0883</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6803</td>
<td>.3177</td>
<td>27.9798</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Linear regressions – full regression tables

**Table 7.8.1: Linear regression including RI x Number of years in non-abusive foster care**

<table>
<thead>
<tr>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
</tbody>
</table>

**Model 1:**
- (Constant) .201 .038 5.316 .000
- Risk index .0343 .010 .313 3.326 .001

**Model 2:**
- (Constant) .202 .037 5.382 .000
- Risk index .0393 .011 .359 3.682 .000
- Years in foster care -.0636 .039 -.159 -1.632 .106

**Model 3:**
- (Constant) .201 .040 5.045 .000
- Risk index .0394 .011 .360 3.637 .000
- Years in foster care -.0645 .042 -.161 -1.550 .124
- Risk x foster years .0008 .012 .007 .068 .946

**Table 7.8.2: Linear regression including RI x Longest period with the same carer**

<table>
<thead>
<tr>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
</tbody>
</table>

**Model 1:**
- (Constant) .201 .038 5.316 .000
- Risk index .0343 .010 .313 3.326 .001

**Model 2:**
- (Constant) .201 .038 5.316 .000
- Risk index .0384 .011 .350 3.343 .001
- Time with same carer .0344 .042 .085 .816 .417

**Model 3:**
- (Constant) .224 .041 5.409 .000
- Risk index .0021 .030 .019 .072 .943
- Time with same carer .0369 .042 .092 .878 .382
- Risk x same carer .0034 .003 .356 1.326 .188
Table 7.8.3.  Linear regression including RI x Number of care units before 12th birthday

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.316</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0343</td>
<td>.010</td>
<td>.313</td>
<td>3.326</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.200</td>
<td>.038</td>
<td>5.289</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0311</td>
<td>.012</td>
<td>.284</td>
<td>2.607</td>
</tr>
<tr>
<td>Care units pre 12 yrs</td>
<td>-.0233</td>
<td>.044</td>
<td>-.058</td>
<td>-.534</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.043</td>
<td>4.640</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0310</td>
<td>.012</td>
<td>.283</td>
<td>2.523</td>
</tr>
<tr>
<td>Care units pre 12 yrs</td>
<td>-.0237</td>
<td>.045</td>
<td>-.059</td>
<td>-.530</td>
</tr>
<tr>
<td>Risk x care units</td>
<td>.0005</td>
<td>.011</td>
<td>.004</td>
<td>.041</td>
</tr>
</tbody>
</table>

Table 7.8.4: Linear regression including RI x Number of non-abusive male primary carers before 12th birthday

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.316</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0343</td>
<td>.010</td>
<td>.313</td>
<td>3.326</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.200</td>
<td>.038</td>
<td>5.281</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0343</td>
<td>.010</td>
<td>.313</td>
<td>3.318</td>
</tr>
<tr>
<td>Male carers pre 12 yrs</td>
<td>-.0231</td>
<td>.039</td>
<td>-.056</td>
<td>-.591</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.200</td>
<td>.038</td>
<td>5.271</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0366</td>
<td>.011</td>
<td>.334</td>
<td>3.372</td>
</tr>
<tr>
<td>Male carers pre 12 yrs</td>
<td>-.0208</td>
<td>.039</td>
<td>-.050</td>
<td>-.527</td>
</tr>
<tr>
<td>Risk x male carers</td>
<td>-.0075</td>
<td>.011</td>
<td>-.071</td>
<td>-.712</td>
</tr>
</tbody>
</table>
Table 7.8.5: Linear regression including RI x Number of non-abusive female primary carers before 12\textsuperscript{th} birthday

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.316</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0343</td>
<td>.010</td>
<td>.313</td>
<td>3.326</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.308</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0337</td>
<td>.010</td>
<td>.308</td>
<td>3.257</td>
</tr>
<tr>
<td>Female carers pre 12 yrs</td>
<td>-.0266</td>
<td>.038</td>
<td>-.066</td>
<td>-.700</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.200</td>
<td>.038</td>
<td>5.248</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0347</td>
<td>.011</td>
<td>.317</td>
<td>3.044</td>
</tr>
<tr>
<td>Female carers pre 12 yrs</td>
<td>-.0241</td>
<td>.040</td>
<td>-.060</td>
<td>-.605</td>
</tr>
<tr>
<td>Risk x female carers</td>
<td>-.0023</td>
<td>.011</td>
<td>-.023</td>
<td>-.213</td>
</tr>
</tbody>
</table>

Table 7.8.6: Linear regression including RI x Good relationship with an adult

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.316</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0343</td>
<td>.010</td>
<td>.313</td>
<td>3.326</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.306</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0353</td>
<td>.011</td>
<td>.322</td>
<td>3.355</td>
</tr>
<tr>
<td>Good reln. with adult</td>
<td>-.0203</td>
<td>.038</td>
<td>-.051</td>
<td>-.528</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.202</td>
<td>.039</td>
<td>5.217</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0352</td>
<td>.011</td>
<td>.322</td>
<td>3.339</td>
</tr>
<tr>
<td>Good reln. with adult</td>
<td>-.0196</td>
<td>.039</td>
<td>-.049</td>
<td>-.504</td>
</tr>
<tr>
<td>Risk x good adult reln.</td>
<td>-.0012</td>
<td>.011</td>
<td>-.011</td>
<td>-.115</td>
</tr>
</tbody>
</table>
Table 7.8.7: Linear regression including RI x Good relationship with a sibling

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.316</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0343</td>
<td>.010</td>
<td>.313</td>
<td>3.326</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.289</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0348</td>
<td>.011</td>
<td>.317</td>
<td>3.268</td>
</tr>
<tr>
<td>Good rein. with sibling</td>
<td>-.0081</td>
<td>.039</td>
<td>-.020</td>
<td>-.207</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.197</td>
<td>.039</td>
<td>5.017</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0349</td>
<td>.011</td>
<td>.319</td>
<td>3.287</td>
</tr>
<tr>
<td>Good rein. with sibling</td>
<td>-.0132</td>
<td>.041</td>
<td>-.033</td>
<td>-.321</td>
</tr>
<tr>
<td>Risk x good sibling rein.</td>
<td>.0047</td>
<td>.011</td>
<td>.042</td>
<td>.426</td>
</tr>
</tbody>
</table>

Table 7.8.8: Linear regression including RI x Good relationship with a peer

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.316</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0343</td>
<td>.010</td>
<td>.313</td>
<td>3.326</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.312</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0349</td>
<td>.010</td>
<td>.319</td>
<td>3.366</td>
</tr>
<tr>
<td>Good rein. with peer</td>
<td>-.0268</td>
<td>.038</td>
<td>-.067</td>
<td>-.711</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.199</td>
<td>.038</td>
<td>5.222</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0355</td>
<td>.010</td>
<td>.324</td>
<td>3.385</td>
</tr>
<tr>
<td>Good rein. with peer</td>
<td>-.0302</td>
<td>.039</td>
<td>-.076</td>
<td>-.783</td>
</tr>
<tr>
<td>Risk x good peer rein.</td>
<td>.0055</td>
<td>.012</td>
<td>.045</td>
<td>.461</td>
</tr>
</tbody>
</table>
The remaining putative protective factors, not included in the protective index, were also analysed to establish their protective qualities. The results are summarised in Table 7.9, whilst full regression tables are given below this for the interactions approaching or attaining significance.

**Table 7.9: Size and significance of interactions between the risk index and the remaining factors not in the protective index excluding control variables, using logistic and linear regressions**

<table>
<thead>
<tr>
<th>Putative protective factor</th>
<th>Logistic regression: significance of interaction</th>
<th>Linear regression: significance of interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of male non-abusive primary carers by age 6 yrs</td>
<td>( p = .63 )</td>
<td>( B = -.08, p = .46 )</td>
</tr>
<tr>
<td>No. of male non-abusive primary carers by age 16 yrs</td>
<td>( p = .95 )</td>
<td>( B = -.09, p = .35 )</td>
</tr>
<tr>
<td>No. of female non-abusive primary carers by age 6 yrs</td>
<td>( p = .17 )</td>
<td>( B = -.24, p = .03 ) (inc. controls, ( B = -.16, p = .12 ))</td>
</tr>
<tr>
<td>No. of female non-abusive primary carers by age 16 yrs</td>
<td>( p = .58 )</td>
<td>( B = -.05, p = .64 )</td>
</tr>
<tr>
<td>No. of male sexually non-abusive primary carers by age 6 yrs</td>
<td>( p = .10 ) (including controls, ( p = .24 ))</td>
<td>( B = -.07, p = .46 )</td>
</tr>
<tr>
<td>No. of male sexually non-abusive primary carers by age 12 yrs</td>
<td>( p = .39 )</td>
<td>( B = .05, p = .61 )</td>
</tr>
<tr>
<td>No. of male sexually non-abusive primary carers by age 16 yrs</td>
<td>( p = .54 )</td>
<td>( B = .01, p = .95 )</td>
</tr>
<tr>
<td>No. of female sexually non-abusive primary carers by age 6 yrs</td>
<td>( p = .70 )</td>
<td>( B = .00, p = .99 )</td>
</tr>
<tr>
<td>No. of female sexually non-abusive primary carers by age 12 yrs</td>
<td>( p = .27 )</td>
<td>( B = .18, p = .20 )</td>
</tr>
<tr>
<td>No. of female sexually non-abusive primary carers by age 16 yrs</td>
<td>( p = .33 )</td>
<td>( B = .13, p = .31 )</td>
</tr>
<tr>
<td>The subject received some psychological treatment</td>
<td>( p = .12 )</td>
<td>( B = .09, p = .35 )</td>
</tr>
<tr>
<td>The subject received a course of psychological treatment</td>
<td>( p = .97 )</td>
<td>( B = -.05, p = .61 )</td>
</tr>
<tr>
<td>Positive response to disclosure by a non-abusive primary carer</td>
<td>( p = .06 ) (including controls, ( p = .10 ))</td>
<td>( B = -.14, p = .15 )</td>
</tr>
<tr>
<td>Perpetrator convicted in court</td>
<td>( p = .32 )</td>
<td>( B = .05, p = .58 )</td>
</tr>
</tbody>
</table>
The results from the first set of logistic regressions (excluding control variables) showed that the interaction between the risk index and two factors approached significance. These were the ‘number of sexually non-abusive male primary carers by the age of six years’ (p = .10) and whether the subject received a ‘positive response from a non-abusive primary carer’ (p = .06) to his abuse disclosure.

### Table 7.10.1: Logistic Regression including RI x Number of male sexually non-abusive primary carers pre 6 years

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2571</td>
<td>.0852</td>
<td>9.1154</td>
<td>1</td>
<td>.0025</td>
<td>.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>.2988</td>
<td>29.5313</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2539</td>
<td>.0851</td>
<td>8.8938</td>
<td>1</td>
<td>.0029</td>
<td>.2718</td>
<td>1.2890</td>
</tr>
<tr>
<td>Male carers pre 6</td>
<td>-.1166</td>
<td>.2711</td>
<td>.1848</td>
<td>1</td>
<td>.6672</td>
<td>.0000</td>
<td>.8900</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6290</td>
<td>.2990</td>
<td>29.6842</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.3415</td>
<td>.1145</td>
<td>8.8960</td>
<td>1</td>
<td>.0022</td>
<td>.2721</td>
<td>1.4070</td>
</tr>
<tr>
<td>Male carers pre 6</td>
<td>-.4910</td>
<td>.3854</td>
<td>1.6227</td>
<td>1</td>
<td>.2027</td>
<td>.0000</td>
<td>.6120</td>
</tr>
<tr>
<td>Risk x male carers pre 6</td>
<td>.2010</td>
<td>.1236</td>
<td>2.6469</td>
<td>1</td>
<td>.1038</td>
<td>.0833</td>
<td>1.2226</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.8151</td>
<td>.3681</td>
<td>24.3110</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 7.10.2: Logistic Regression including RI x Positive response to disclosure by non-abusive primary carer

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2571</td>
<td>.0852</td>
<td>9.1154</td>
<td>1</td>
<td>.0025</td>
<td>.2608</td>
<td>1.2932</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6239</td>
<td>.2988</td>
<td>29.5313</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.2653</td>
<td>.0866</td>
<td>9.3753</td>
<td>1</td>
<td>.0022</td>
<td>.2811</td>
<td>1.3038</td>
</tr>
<tr>
<td>Positive response</td>
<td>.1847</td>
<td>.2598</td>
<td>.5053</td>
<td>1</td>
<td>.4772</td>
<td>.0000</td>
<td>1.2029</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.6401</td>
<td>.3022</td>
<td>29.4560</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk index</td>
<td>.3174</td>
<td>.1009</td>
<td>9.8994</td>
<td>1</td>
<td>.0017</td>
<td>.2917</td>
<td>1.3738</td>
</tr>
<tr>
<td>Positive response</td>
<td>.4450</td>
<td>.3166</td>
<td>1.9762</td>
<td>1</td>
<td>.1598</td>
<td>.0000</td>
<td>1.5605</td>
</tr>
<tr>
<td>Risk x positive response</td>
<td>-.1666</td>
<td>.0972</td>
<td>3.6485</td>
<td>1</td>
<td>.0561</td>
<td>-.1333</td>
<td>.8466</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.8795</td>
<td>.3711</td>
<td>25.6443</td>
<td>1</td>
<td>.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Two further logistic regressions were therefore run for the interaction between these factors and the risk index, this time controlling for 'time from date of birth to cut-off' and 'age of subject'. Under these conditions, the interaction between risk and 'number of sexually non-abusive male primary carers by the age of six years' was non-significant (p = .24). However, the interaction between risk and 'positive response from a non-abusive primary carer' still appeared to approach significance (p = .10). The full regression table showing this latter interaction is produced in Table 7.10.3.

Table 7.10.3: Logistic Regression including RI x Positive response by non-abusive primary carer and control variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.3959</td>
<td>.1103</td>
<td>12.8781</td>
<td>1</td>
<td>.0003</td>
<td>-.3224</td>
<td>.6731</td>
</tr>
<tr>
<td>Age</td>
<td>.2070</td>
<td>.0814</td>
<td>6.4595</td>
<td>1</td>
<td>.0110</td>
<td>.2064</td>
<td>1.2300</td>
</tr>
<tr>
<td>Constant</td>
<td>-.4493</td>
<td>1.9996</td>
<td>.0505</td>
<td>1</td>
<td>.8222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.5648</td>
<td>.1414</td>
<td>15.9614</td>
<td>1</td>
<td>.0001</td>
<td>-.4011</td>
<td>.5685</td>
</tr>
<tr>
<td>Age</td>
<td>.2348</td>
<td>.0910</td>
<td>6.6576</td>
<td>1</td>
<td>.0099</td>
<td>.2317</td>
<td>1.2647</td>
</tr>
<tr>
<td>Risk index</td>
<td>.3751</td>
<td>.1055</td>
<td>12.6494</td>
<td>1</td>
<td>.0004</td>
<td>.3503</td>
<td>1.4551</td>
</tr>
<tr>
<td>Constant</td>
<td>.8867</td>
<td>2.3192</td>
<td>.0505</td>
<td>1</td>
<td>.8222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.6069</td>
<td>.1518</td>
<td>15.9909</td>
<td>1</td>
<td>.0001</td>
<td>-.4500</td>
<td>.5450</td>
</tr>
<tr>
<td>Age</td>
<td>.2489</td>
<td>.0958</td>
<td>6.7436</td>
<td>1</td>
<td>.0094</td>
<td>.2621</td>
<td>1.2826</td>
</tr>
<tr>
<td>Risk index</td>
<td>.4253</td>
<td>.1212</td>
<td>12.3210</td>
<td>1</td>
<td>.0004</td>
<td>.3865</td>
<td>1.5300</td>
</tr>
<tr>
<td>Positive response by carer</td>
<td>.4467</td>
<td>.3330</td>
<td>1.7990</td>
<td>1</td>
<td>.1798</td>
<td>.0000</td>
<td>1.5631</td>
</tr>
<tr>
<td>Constant</td>
<td>1.0507</td>
<td>2.3788</td>
<td>.1951</td>
<td>1</td>
<td>.6578</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.6128</td>
<td>.1581</td>
<td>15.0306</td>
<td>1</td>
<td>.0001</td>
<td>-.4403</td>
<td>.5418</td>
</tr>
<tr>
<td>Age</td>
<td>.2395</td>
<td>.0944</td>
<td>6.4386</td>
<td>1</td>
<td>.0112</td>
<td>.2570</td>
<td>1.2706</td>
</tr>
<tr>
<td>Risk index</td>
<td>.4881</td>
<td>.1459</td>
<td>11.1861</td>
<td>1</td>
<td>.0008</td>
<td>.3697</td>
<td>1.6292</td>
</tr>
<tr>
<td>Positive response by carer</td>
<td>.7399</td>
<td>.4230</td>
<td>3.0592</td>
<td>1</td>
<td>.0803</td>
<td>.1255</td>
<td>2.0958</td>
</tr>
<tr>
<td>Risk x positive response</td>
<td>-.1748</td>
<td>.1077</td>
<td>2.6317</td>
<td>1</td>
<td>.1047</td>
<td>-.0970</td>
<td>.8397</td>
</tr>
<tr>
<td>Constant</td>
<td>1.0177</td>
<td>2.4392</td>
<td>.1741</td>
<td>1</td>
<td>.6765</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As this interaction approached significance even when control variables were included, it was therefore explored in more detail. The risk index was split at the median value to derive two groups representing low and high scores. The subjects were then divided into one of four groups depending on their risk score and on whether they had received a positive response to their disclosure of sexual abuse. Table 7.11 below illustrates the
proportions of subjects who became perpetrators in each of the possible groups. The fraction in brackets represents the number of perpetrators divided by the total number of subjects in the group. A graph (Figure 7.1) was also plotted of Table 7.11 to illustrate the interaction.

Table 7.11: Proportions of perpetrators with low and high risk scores who received a positive response to their disclosure

<table>
<thead>
<tr>
<th>Risk Index score</th>
<th>Low</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No positive response</td>
<td>0.06 (2/34)</td>
<td>0.30 (11/33)</td>
<td>67</td>
</tr>
<tr>
<td>Positive response</td>
<td>0.19 (4/21)</td>
<td>0.25 (4/16)</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>49</td>
<td>104</td>
</tr>
</tbody>
</table>

Figure 7.1: Graph of the interaction between the risk index and a positive response by a non-abusive primary carer

The above graph suggests, counter intuitively, that for subjects who experienced lower levels of risk, receiving a positive response to their disclosure of sexual abuse actually increased the likelihood that they would go on to become a perpetrator of sexual abuse. However for subjects who experienced higher levels of risk, whether they received a positive response to the disclosure of their abuse appeared to make little difference to their perpetrating outcome.

As none of the interactions were significant using a logistic regression, a further set of linear regressions were then run, entering all the same factors and their interactions with
the risk index. This was done first without control variables, as described above. The interaction between the risk index and the number of female primary carers the subject had by the age of six was found to be significant (B = -.24, p = .03). This can be seen in the regression table below.

Table 7.12: Linear Regression including RI x Number of non-abusive female primary carers by the age of 6 years

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.316</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0343</td>
<td>.010</td>
<td>.313</td>
<td>.001</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.201</td>
<td>.038</td>
<td>5.318</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0282</td>
<td>.012</td>
<td>.257</td>
<td>.020</td>
</tr>
<tr>
<td>Female carers pre 6 yrs</td>
<td>-.0445</td>
<td>.044</td>
<td>-.110</td>
<td>.313</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.155</td>
<td>.043</td>
<td>3.629</td>
<td>.000</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0318</td>
<td>.012</td>
<td>.291</td>
<td>.008</td>
</tr>
<tr>
<td>Female carers pre 6 yrs</td>
<td>-.0901</td>
<td>.048</td>
<td>-.223</td>
<td>.064</td>
</tr>
<tr>
<td>Risk x female carers</td>
<td>-.0248</td>
<td>.011</td>
<td>-.240</td>
<td>.033</td>
</tr>
</tbody>
</table>

This was explored further in the way described above, and the graph of the interaction can be seen below.

Table 7.13: Proportions of perpetrators with low and high risk scores who had positive response to their disclosure

<table>
<thead>
<tr>
<th>Risk Index score</th>
<th>Low</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No non-abusive female carer by age 6 years</td>
<td>0.14 (5/35)</td>
<td>0.36 (15/42)</td>
<td>77</td>
</tr>
<tr>
<td>At least one non-abusive female carer by age 6 years</td>
<td>0.05 (1/20)</td>
<td>0.0 (0/7)</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>49</td>
<td>104</td>
</tr>
</tbody>
</table>
The above graph represents a typical interaction effect. At low levels of risk, subjects who had at least one non-abusive female primary carer by the age of six years appeared only marginally less likely to become sexual perpetrators than those who did not at this young age have such a figure in their lives. However, under conditions of high risk, having a non-abusive mother figure appears to make a significant difference to the perpetration outcome.

A further regression was run including the control variables as well as an interaction term between the risk index and having a non-abusive female primary carer by the age of six years. This interaction proved not to account for any significant variance in the outcome when controls were added ($p = .12$), however the full regression table has been reproduced in Table 7.14 below.
Table 7.14: Linear Regression including RI x Non-abusive female primary carer by age six years – including control variables

<table>
<thead>
<tr>
<th>Model 1:</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.346</td>
<td>.272</td>
<td>-1.270</td>
<td>.207</td>
</tr>
<tr>
<td>Age</td>
<td>.0249</td>
<td>.012</td>
<td>.197</td>
<td>2.033</td>
</tr>
<tr>
<td>Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.510</td>
<td>.324</td>
<td>1.573</td>
<td>.119</td>
</tr>
<tr>
<td>Age</td>
<td>.0309</td>
<td>.011</td>
<td>.245</td>
<td>2.702</td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.0679</td>
<td>.016</td>
<td>-.381</td>
<td>-4.200</td>
</tr>
<tr>
<td>Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.569</td>
<td>.300</td>
<td>1.896</td>
<td>.061</td>
</tr>
<tr>
<td>Age</td>
<td>.0323</td>
<td>.011</td>
<td>.256</td>
<td>3.054</td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.0741</td>
<td>.015</td>
<td>-.416</td>
<td>-4.939</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0391</td>
<td>.009</td>
<td>.357</td>
<td>4.269</td>
</tr>
<tr>
<td>Model 4:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.562</td>
<td>.300</td>
<td>1.876</td>
<td>.064</td>
</tr>
<tr>
<td>Age</td>
<td>.0325</td>
<td>.011</td>
<td>.258</td>
<td>3.079</td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.0740</td>
<td>.015</td>
<td>-.415</td>
<td>-4.837</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0330</td>
<td>.011</td>
<td>.301</td>
<td>3.119</td>
</tr>
<tr>
<td>Female carers by 6</td>
<td>-.0447</td>
<td>.039</td>
<td>-.111</td>
<td>-1.151</td>
</tr>
<tr>
<td>Model 5:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.547</td>
<td>.298</td>
<td>1.838</td>
<td>.069</td>
</tr>
<tr>
<td>Age</td>
<td>.0301</td>
<td>.011</td>
<td>.239</td>
<td>2.839</td>
</tr>
<tr>
<td>Time from dob</td>
<td>-.0713</td>
<td>.015</td>
<td>-.400</td>
<td>-4.764</td>
</tr>
<tr>
<td>Risk index</td>
<td>.0352</td>
<td>.011</td>
<td>.321</td>
<td>3.322</td>
</tr>
<tr>
<td>Female carers by 6</td>
<td>-.0743</td>
<td>.043</td>
<td>-.184</td>
<td>-1.729</td>
</tr>
<tr>
<td>Risk x Female carers</td>
<td>-.0182</td>
<td>.010</td>
<td>-.157</td>
<td>-1.556</td>
</tr>
</tbody>
</table>

7.5.6 Further analysis

There are a number of possible explanations to account for the almost complete lack of significant interactions in the above analysis. These will be discussed in the next chapter. However, it was considered appropriate to attempt to circumvent some of the possible causes of the non-significant findings in order to uncover any genuine protective effects that may have been obscured.
Four possible approaches were attempted. These are described below, together with the reasons for adopting them.

### 7.5.6.1 Removal of Outliers

The first approach addressed the possibility that outliers in the two control variables (‘age at 1.5.99’; ‘time from subject’s d.o.b. to cut-off date’) were distorting the results of the regression. This problem could be tackled by removing the outliers from the regression calculation.

An outlier was defined as a score that was greater than three standard deviations from the mean. Four outliers in all were removed: three from the ‘time from subject’s d.o.b. to cut-off date’ variable (all victims-only) and one from the ‘age at 1.5.99’ variable (a victim-perpetrator). Even when the outliers were removed, these variables accounted for significant (or very nearly significant) amounts of variance in the outcome. They were therefore both still included as control variables in the new logistic regression that was run to reanalyse the interaction between the protective and risk indices.

Although the significance of this interaction appeared to increase following this procedure, the results still suggested a non-significant interaction (p = .20). This effect also applied to subsequent interactions that were run separately between the risk index and each of the constituent variables in the protective index. Thus the removal of outliers had no material effect on the results.

### 7.5.6.2 Matched pairs

There was a possibility that the lack of a significant interaction could be due to limited power in the regression. This could be as a result of controlling for both ‘time from d.o.b. to cut-off’ and ‘age at 1.5.99’ in the first step of the regression. Therefore, rather than controlling for the two variables statistically, I decided to match the 21 victim-perpetrators with 21 victims-only. The groups were matched first on ‘time from d.o.b. to cut-off’ and then on ‘age at 1.5.99’ as the former had a stronger correlation with the outcome. Thus an individual victim-perpetrator was matched with the victim-only subject whose ‘time from d.o.b. to cut-off’ value was closest to the victim-perpetrator’s. If there were more than one victim-only with the same value as the victim-perpetrator, the victim-only whose age was closest to the victim-perpetrator would be selected.
A new logistic regression was therefore run with this matched sub-sample, to test the interaction between the risk and protective indices. The relationships between the perpetrating outcome and 'time from d.o.b. to cut-off' (correlation = 0.004, p = .98) and 'age at 1.5.99' (correlation = 0.21, p = .19) were no longer significant and could therefore be left out of the first block of the regression. However, this procedure again made little difference to the overall result. The interaction between the two indices was still non-significant (p = .25). No further regressions were run with the matched pairs.

7.5.6.3 Early vs. Late perpetrators
As described above (Section 7.2), it was apparent that the victim-only group had significantly more time to build up information about protection than the victim-perpetrators. In the final approach to analysing this data set, an alternative means of controlling for this difference was adopted. A further logistic regression was run in which only those individuals who began perpetrating at an older age were included in the sample. The perpetrating group were split at the median score of their 'age at first perpetration' and the half who were older when they started their abusive behaviour were included in the analysis.

To establish whether 'time from d.o.b. to cut-off date' and 'age on 1.5.99' were still significantly related to the dependent variable using this sub-sample, t-tests were run. These showed that neither the former (t = .67, df = 92, p = .51) nor the latter variable (t = .81, df = 10.96, p = .44) needed to be controlled for in any logistic regression with this sub-sample.

A logistic regression was therefore run with the risk index entered in the first block, the protective index in the second and the interaction term in the third block. The interaction accounted for no significant variance in the dependent variable (Exp. (B) = 1.00, R = .00, p = .96).

7.5.6.4 Excluding factors with inadequate reliability
It remained a possibility that those factors for which adequate trawling or coding reliability had not been found (i.e. good relationship with adult, sibling and peer) were so error-laden that they did not represent the concepts they were intended to. This may
have therefore obscured any protective effect that these concepts may have had, were they to have been trawled and coded reliably. A final test of the protective index, therefore, involved stripping these factors out of the index and re-running the logistic and linear regressions with the new protective index, excluding control variables. However, despite this procedure, no significant interactions between the risk and protective indices were established using logistic (p = .24) or linear (p = .95) regression techniques.
Chapter Eight  Discussion

8.1 Introduction

This chapter will begin by briefly summarising the main results from the research reported in this thesis. This will be followed by a discussion of some of the findings, including demographic data, compensatory factor and risk factor analysis. However, the main focus of this chapter will comprise a discussion of the analysis of putative protective factors. This will include a description of some of the strengths and the weaknesses of the study design and suggestions as to why these particular results were achieved. Where possible, alternative approaches will be proposed to overcome some of these weaknesses should future research be attempted. The clinical implications of the results will also briefly be discussed, and the chapter will conclude with ideas for further exploration.

8.2 Description of the main results

In the following section, the results of the risk factor analysis will be described first, followed by the results pertaining to protective factors.

Of the seven putative risk factors under investigation, three were identified as having a significant association with the perpetrating outcome: sexual abuse by a female (OR = 3.03; 95% CI = 1.06 to 8.68), neglect - failure to provide (OR = 3.43; 95% CI = 1.21 to 9.72) and neglect - lack of supervision (OR = 3.03; 95% CI = 1.11 to 8.30). These factors were thus found to be risk factors for the development of sexually abusive behaviour in sexually victimised males because they longitudinally and independently predicted sexually abusive behaviour. In addition, the factor 'witnessing intrafamilial physical abuse' approached significance in predicting perpetrating behaviour (OR = 3.01; 95% CI = 0.96 to 10.02).
In Hypothesis 1 (see Section 7.4.2) it had been proposed that an index of seven putative risk factors would discriminate victims of sexual abuse (victim-perpetrators; n = 21) who went on to perpetrate from those who did not (victims-only; n = 83). A statistically significant difference was found between the scores of the two groups on such a risk index (t = 3.49, df = 102, p<.01), with the victim-perpetrator group experiencing more maltreatment of the subtypes included in the index (mean = 4.90, s.d. = 1.55) than the victim-only group (mean = 3.52, s.d. = 1.65). These results confirmed Hypothesis 1.

One putative protective factor was found to be a compensatory factor against the development of sexually abusive behaviour. This was ‘the number of care units experienced by the subjects prior to their 12th birthday’ (t = -2.06, df = 102, p = .04).

In Hypothesis 2, it was proposed that if the scores of certain putative protective factors were summated in a protective index (PI), this would significantly interact with the risk index to reduce the likelihood of perpetrating in individuals otherwise at risk of doing so. This was tested using both logistic and linear regressions. In addition to being performed without controlling for any variables, both of these regression techniques were performed whilst controlling for two potentially confounding variables (‘time available to accumulate protective variables’ and ‘age of subjects’). None of these four approaches resulted in a statistically significant interaction between the risk index and putative protective index. These results would suggest, therefore, that this latter index of factors was not protective within the present study and sample. This is because the interaction between the protective index and the risk index of factors studied did not significantly reduce the likelihood that individuals exposed to risk would become perpetrators of sexual abuse.

When further logistic and linear regressions were run to investigate the protective effects of the individual putative protective factors in the PI, no significant interactions at the .05 significance level were established. However one interaction between the risk index and the factor ‘longest period with the same carer’ approached significance (p = .06). This was identified by running a logistic regression, excluding the control variables. When the control variables were added, the interaction was no longer significant (p = .37). Furthermore, when a linear
regression was run, no significant interaction was found even when the control variables were excluded (p = .19).

Additional regressions, both logistic and linear, were run including interactions between the risk index and all the remaining factors not included in the PI. The interaction between the risk index and the 'number of female non-abusive primary carers by the age of six years' produced a statistically significant interaction (p = .03). This was a linear regression in which the control variables were excluded. When these controls were included, the interaction was non-significant (p = .12). In addition, when this interaction had been included in a logistic regression, it had been found to be non-significant (p = .17).

Of the remaining interactions that were tested, three approached significance. When entered into a logistic regression in which the control variables were excluded, the interaction between the risk index and the 'number of male sexually non-abusive primary carers a subject had experienced by the age of 6 years' approached significance (p = .10). When the controls were included, the interaction was clearly non-significant (p = .24). This was also the case when the interaction was entered without the control variables into a linear regression (p = .46).

Finally, the interaction between the risk index and 'positive response to disclosure by a non-abusive primary carer' approached significance in two logistic regressions, both when the control variables were excluded (p = .06) and when they were included (p = .10). Although the interaction was not significant when entered in a linear regression (p = .15), it was considered appropriate to investigate this interaction further. When the probability of perpetrating was plotted against the risk index scores for those with and without the protective factor (a positive response to his disclosure), it was found that under low risk conditions, receiving a positive response to one's disclosure appeared to increase the likelihood that a subject would go on to sexually offend.

Further attempts were made to identify significant interactions between the risk and protective indices. These involved using alternative means of controlling for 'age'
and ‘time from date of birth to cut-off date’ other than statistical control techniques. However, none of the interactions tested in these ways were statistically significant.

8.2.1 Summary

In the course of this study, therefore, an index of seven putative risk factors was found to significantly discriminate those sexually abused subjects who went on to perpetrate sexually abusive behaviour from those who did not. Three of these factors were found to have a significant association with the perpetrating outcome: sexual abuse by a female, neglect — failure to provide, and neglect — lack of supervision.

A single protective factor was identified, namely the ‘number of non-abusive female primary carers the subject had had prior to age 6 years’. A significant interaction was found between this factor and the risk index. However, when the variables ‘age’ and ‘time from date of birth to cut-off date’ were controlled within the regression, the interaction was no longer significant. In fact, once these control variables had been entered into the regression, not a single factor was identified as interacting significantly with the risk index.

The interactions of two other factors with the risk index, however, suggest that they could warrant further investigation. These were the ‘longest period the subject lived with the same primary carer’, and the ‘number of sexually non-abusive male primary carers prior to age 6 years’. In addition the interaction between the risk index and ‘positive response to disclosure by a non-abusive primary carer’ deserves some discussion.

There are several possible explanations for the other, largely negative, results found in this study. Although there were several strengths to this design, there were also weaknesses, which could account for the failure to identify significant interactions with risk. The strengths and weaknesses will be described below and, where possible, alternative approaches will be outlined.
8.3 Discussion of the results

There are a number of comments to make about these findings, including the weight that can be attached to them, the extent to which aspects agree with previous research and the conclusions that can be drawn at this stage. The discussion points relating to the demographic data and the size of the perpetrator group will be presented briefly first followed by the risk and compensatory factor results. The major part of this section will be concerned with the results of the protective factor analysis.

8.3.1 Demographic data

Only two of the demographic variables coded in this study approached or attained significance in their discrimination of the victim-perpetrator group from the victim-only group. These were the age of the two groups on a specified date (1.5.99) and the available time span from which information about risk and protective factors could be drawn, known as 'time from date of birth to cut-off date'. These factors were artefacts of the research design that, although requiring control, were not theoretically relevant variables that were acting as risk factors for sexually abusive behaviour. Each will be discussed in turn.

First, with regards to the age of the two groups, it was found that the mean age of the victim-perpetrators was greater than that of the victim-only group. This is likely to be a function of the early foundation date and specialist nature of the sexual abuse clinic at Great Ormond Street Hospital to which these individuals were referred. When it was founded in the early 1980s, the clinic was one of the only teams in the UK catering for sexual abuse victims and perpetrators and as such received referrals from all over the country. Having limited resources, social service departments and health authorities tended to only send their most extreme cases, often those exhibiting challenging behaviour such as adolescent perpetrators of sexual abuse. Hence, many of the subjects in this study were referred because of their abusive behaviour, rather than their victimisation. These individuals were included in this study because there were documents that pre-dated their first episode of abusive behaviour, which detailed their maltreatment experiences. As time went on, however, the clinic tended to receive greater numbers of younger victims of abuse who had not developed an
abusive pattern of behaviour. This is likely to be the reason for the discrepancy in age between the two groups, although a reminder should be added that this difference only approached significance. It was a conservative decision to include this factor as a control variable.

The second factor that was controlled, then, was 'time from date of birth to cut-off date'. Much has already been written about the unclear meaning of this factor and the decision to control for it in the regression analysis (see Section 7.2). It is hard to envisage a circumstance under which this time span would not be significantly less for victim-perpetrators than for victims-only, so long as individuals who began perpetrating before the age of 16 were included in the study. This is because risk and protection information about all of these subjects could only have been drawn from documents written prior to their first date of perpetration, often long before their 16th birthday. Meanwhile information about the non-perpetrators would have invariably been drawn from documents written any time between their date of birth and their 16th birthday. The only situation where non-perpetrators would have had an earlier cut-off date would have been when their social service file was closed prior to this birthday. This occurred only very rarely.

Two possible alternatives to minimise the risk of this occurring might have been, first, to exclude all perpetrators who began their offences prior to reaching sixteen. Then information about both groups could be drawn from exactly the same time period, the first sixteen years of their lives. The problem with this is that it would have excluded nineteen of the twenty-one perpetrators in this study. Furthermore, it would have meant an almost total reliance on criminal records data as the source of a subject’s perpetration status. This would be likely to further reduce the size of the victim-perpetrator group, and thereby further limit the generalisability of the current results to the broader population of sexual abuse perpetrators. A second possibility would have been to only include data on both groups up to a certain age (say twelve years old), and exclude all subjects who perpetrated before this date. The only problem with this is that it is an arbitrary cut-off that is likely to result in important data being excluded. This was of course possible using the arbitrary cut-off of sixteen, as used in the current study, but the earlier the date used, the more likely that important data are excluded.
8.3.2 Perpetrator group size

The number of perpetrators identified in this study was 21. However, it cannot be concluded that 20.2% (21/104) of male victims of sexual abuse go on to become perpetrators. This is because of the inclusion of subjects who were referred to the sexual abuse clinic as perpetrators of abuse, who were subsequently established as having previously been sexually victimised. Thus the proportion is inflated by the presence of the sexual abusers.

Of course, it is possible that a number of the 83 subjects in the victim-only group were in fact perpetrators whose behaviour escaped official attention. The effects of this likely error are discussed in detail in Section 8.3.5.1.

8.3.3 Risk factor analysis

With regard to the three variables identified as risk factors of sexually abusive behaviour (neglect - lack of supervision, neglect - failure to provide, sexual abuse by a female), there were several aspects to the design of the current study that allow some degree of confidence to be placed in these findings. Perhaps the most significant of these was the longitudinal design, which addressed many of the problems associated with the largely retrospective research that has preceded this study. For example, as a result of the longitudinal design and the safeguards employed in the study, we can be relatively confident that those subjects coded as having experienced certain risk factors actually did so and that these events first occurred prior to the onset of their perpetrating behaviour. The same degree of confidence would not be possible from a retrospective study.

The importance of neglect is strongly suggested by these results. This is in contrast to previous research in which neglect has not been found to be a risk factor for sexual offending (Widom & Ames, 1994). However, it must be remembered that the current study was investigating subjects who had all experienced sexual abuse whilst the
Widom and Ames (1994) study involved many subjects who had not. In addition, there were some problems with the measurement of outcome in the latter study.

Some support for the importance of neglect in the development of various forms of offending behaviour has been found in two recent studies (Boswell, 1995; Falshaw & Browne, 1997). In these, neglect was identified as a common experience in the lives of young people who had displayed various forms of deviant behaviour and who were resident in either secure accommodation or prisons. In the first of these, Boswell (1995) studied the records of 200 ‘Section 53 offenders’, and interviewed a sub sample of them to investigate their childhood experiences. Section 53 offenders are young people detained under Section 53 of the Children and Young Persons Act 1933 for a murder conviction when under 18 years (subsection 1) or a conviction for another serious offence (e.g. arson, rape and manslaughter) when less than 17 years (subsection 2). Boswell found that 28.5% of her sample of offenders had experienced neglect, emotional abuse or rejection. Unfortunately because these three experiences were placed together in a single maltreatment subcategory, it was not clear how many subjects experienced neglect alone.

A study by Falshaw and Browne (1997) made sharper delineations in their abuse definitions. They investigated the maltreatment histories of 79 residents of a youth treatment centre, which admitted “seriously disturbed and antisocial” young people (24% female) between 11 and 18 years old. Looking only at the males in the sample, most of them had committed offences including: sexual misconduct (30%); violent behaviour (80%); and criminal damage (67%). The authors found that 32% (n=19) had experienced neglectful experiences within the family home. This seems a high proportion, and given the subsequent antisocial behaviour of these individuals, the relevance of childhood neglect to adverse outcomes seems to be suggested. However, no relationship was found between neglect and subsequent sexual misconduct. Clearly more research is needed before any firm conclusions can be drawn about the role of neglect.

The identification of ‘sexual abuse by a female’ as a risk factor for subsequent sexual offending is a potentially controversial finding. It is important to guard against ascribing blame to any particular group, whilst also giving due attention to all aspects
of the results. With regard to this finding, the key question is what aspect of this factor is significant? It is not necessarily the case that being abused by a female, rather than by a male, is the most important aspect. Nineteen of the 22 subjects who had experienced sexual abuse by a female had also been abused by at least one male. Thus, being abused by a female could be an indication that the subject had no individuals who were close to him that he could rely on to be non-abusive. Alternatively, or even additionally, some aspect of the perpetrator’s gender could be important in the subsequent development of his sexual offending. Further investigations would be necessary to establish the correct explanation.

It may be worth noting that the association between witnessing intrafamilial physical abuse and becoming a perpetrator of sexual abuse approached significance (OR = 3.01; 95% CI = 0.96 to 10.02). In a previous cross sectional study of adolescent male sexual abuse perpetrators (Skuse et al., 1998), witnessing intrafamilial violence had been found to discriminate boys who had been previously sexually victimised from those who had not.

With regard to Hypothesis 1, it was found that the mean risk index scores of the victim-perpetrators were over 0.83 of a standard deviation higher than those of the victim-only group. This suggests that the more subtypes of maltreatment experienced by an individual in addition to being sexually abused, the more likely they are to go on to perpetrate such abuse.

Some support for this notion can be found in previous research (Boswell, 1995; Falshaw & Browne, 1997). In the study referred to above, Falshaw and Browne found that 72% of their sample of disturbed and antisocial treatment centre residents had experienced one or more forms of abuse and neglect. Furthermore, the experience of one form of abuse frequently increased the likelihood that another form of abuse would be experienced. For example, those individuals who experienced physical abuse were more likely to witness other intrafamilial physical abuse, to experience emotional abuse, and to experience neglect, than those who were not physically abused. Although no mention was made of whether the number of abuse subtypes experienced was linked to subsequent deviant behaviour, these
data suggest that harmful experiences tend to co-occur in the lives of subsequently antisocial individuals.

As well as enabling the investigations into putative protective factors in the current study, the fact that the risk index significantly discriminated the victim-perpetrators from the victim-only group has potentially important implications for mental health professionals and social workers. It suggests that information about these factors, collected at the time that these events occurred, could assist such professionals in their risk assessment of individuals who had themselves experienced sexual abuse. However, replication of these results on a further sample of sexually abused males would be necessary first. In addition, the usefulness of the risk index would depend on the sensitivity and specificity of its discriminations. As the subject of this thesis is protection, these issues were not explored further.

8.3.4 Compensatory factor analysis

Only one of the eleven factors assessed, the number of care units experienced by the subject before his 12th birthday, was found to be significantly associated with the perpetration outcome ($t = 2.06$, $df = 102$, $p = .04$). The differences in means between the two groups suggested that the lower the number of care units experienced before the age of twelve, the less likely the subject was to become a perpetrator. This implies that stability in a subject's early care is associated with a non-sexually abusive outcome.

This result might appear to make intuitive sense for individuals drawn from the general population, stability being regarded as a positive influence on development. However, many of the subjects in the current study were victims of several subtypes of maltreatment, most of which was perpetrated within their own families. Stability in such families would constitute stable exposure to abuse, which is unlikely to prove protective against the perpetration outcome. Of course, in the context of a sample who all experienced widespread maltreatment and some discontinuity of care, it may not be so surprising that having a little less disruption is associated with non-perpetration. For example, it may be that the victim-only subjects experienced many
changes in caregivers whilst living with their biological families but when moved to another care arrangement they remained in that same setting for longer. The victim-perpetrators, by contrast, may never have experienced a stable home life.

There is a further anomaly with this result. The fact that stability of care is associated with the non-perpetrating outcome implies that discontinuity of care should be associated with the perpetrating outcome. Discontinuity of care should in theory be a risk factor for sexually abusive behaviour. However, the results from the risk factor section showed that discontinuity of care was not a significant risk factor (OR = 2.13; 95% CI = 0.25 to 17.98). This may have been because the compensatory factor involved measuring the number of care units up to the age of 12 whilst the putative risk factor was a dichotomous measure, i.e. simply indicating if there had or had not been any discontinuity of care. A final possible explanation for this result is that it occurred by chance, being only one out of eleven variables that correlated significantly with the outcome.

8.3.5 Protective factor analysis

In this section, all the analysis relating to protective factors will be discussed. The section will start with a discussion of the protective index results, looking at possible explanations for them, including various sources of error in the methodology. The analysis of individual putative protective factors will subsequently be discussed, followed by a number of more general observations about the study.

8.3.5.1 The protective index

The first results to consider concerning protective factors are the non-significant interactions between the risk and protective indices. Two possible conclusions could be drawn from these results:

- the index of these factors is not protective against the development of sexually abusive behaviour in sexually victimised males;
when combined in an index, these factors may be protective but the number of methodological problems with the current study made a significant interaction difficult to establish.

The evidence that exists is certainly weighted towards the first possibility. Given that no previous study has addressed this question in this way, the current study is the only empirical research that can be drawn on. The interactions were tested using logistic and linear regressions, both with and without control factors. If the interaction between these indices had even approached significance, this should have been picked up in the analysis.

However, there are a number of methodological factors that could explain the lack of significance in these interactions, other than the possibility that these variables are not protective. First, it is extremely difficult to establish a statistically significant interaction in any study employing a non-experimental design (McClelland & Judd, 1993). The relative inability to control for factors compared to in experimental designs inevitably leads to greater error. According to McClelland and Judd (1993), this means that interaction effects typically account for only a small amount of variance in non-experimental designs. Thus there are recognised difficulties in identifying protective factors in this way.

A second factor relates to the nature of the sample in this study. The sample consisted of individuals whose sexual victimisation or perpetrating behaviour had been discovered and then brought to the attention of both social services and then subsequently Great Ormond Street Hospital. The sexual abuse clinic at GOSH, which opened in 1980, was one of the first in the UK to offer assessment and treatment to children and adolescents who had been victims or perpetrators of childhood sexual abuse. By 1985 the level of expertise developed at the hospital meant that it had begun to see the more extreme cases of abuse. The majority of subjects (82.7%) in this sample were referred to GOSH from 1985 onwards. It is likely, therefore, that this sample represents some of the most extreme examples of childhood maltreatment. It is also possible that this bias was exacerbated by the rejection of those individuals whose clinical files lacked sufficient information for tracing their
social service file. The resultant lack of information about these individuals means that the extent and nature of this potential bias is unknown.

There are two possible effects of this sample bias that counted against the possibility of demonstrating that the index was protective. First, protective experiences or relationships were always likely to be extremely rare in a group like this. This low base rate of protection would make it harder to establish a statistically significant interaction. Second, the severe and chronic nature of the maltreatment that the subjects were exposed to would make it less likely that any factors could exert a powerful enough protective effect to be identified in a study such as this.

A further factor is likely to have contributed to the low number of protective-type experiences (i.e. the low base rate of protection) that was found in this study. This was the reliance on contemporaneous documents that were written for purposes other than the study's aims. The problem with this was that child protection workers in the 1980's were mostly interested in their clients' risk experiences, i.e. their maltreatment, rather than anything positive that might have happened to them. Thus they tended to be at best inconsistent in their recording of protective experiences. This not only had the effect of reducing the base rate of protection recorded by the coding system used in the study, but also error was increased. A number of subjects who may have experienced protection would not have had it recorded as such. Both of these problems would have made a significant interaction harder to establish.

A fourth factor that may have contributed to the largely non-significant results is the likely misclassification of some subjects' perpetrator status. Errors of this kind could have been made for several reasons. The classification of perpetrator status was made using three sources of data: criminal records, clinical files, and social services files. There are inherent problems with all three.

First, with respect to criminal records, several subjects might have become perpetrators of sexual abuse but either the police had not become aware of this or had not found sufficient evidence for a caution or a conviction. If the subjects had been under 18 years at the time there was a chance that their behaviour may have been picked up by social services, but beyond this age such information would not have
come to light. In addition, the criminal records databases were only scanned at a single time point. Any subjects who subsequently displayed sexually abusive behaviour would have been missed by the study even if it had been picked up by the police.

A further possible cause of misclassification relates to caution records and the tracing of subjects' movements in the past five years. Caution records were held in the local police forces where the subjects acquired their cautions and these were identified from the General Practitioners the subjects had registered with. There may have been subjects who, when moving location did not register with a GP. This seems more likely for those subjects who had been sexually deviant as they may have wanted to keep a low profile especially if they were distrustful of authority figures. Subjects who did not register, or did not change their registration when they moved would have been recorded as living in a single location and caution records would only have been searched there. Any sexual offence cautions they picked up in other locations where they had lived would have been missed. In addition, the subjects' living locations were only identified for the five years preceding the study date. Thus any cautions for sexual offences that occurred prior to this time would not have been found.

Finally, some police forces are more efficient than others at removing expired cautions from their databases. This would have introduced some random error into the perpetration status ascribed to the subjects.

With regards to the clinical and social services records, the problem with relying on information about perpetration contained in these files concerns the validity of the statements. Social workers obviously do not require the same amount of evidence for them to record an occurrence of sexually abusive behaviour in their files as the police do to secure a caution or a conviction. Whilst including these sources of data may increase the sensitivity of the perpetration classification system, its specificity may be reduced. In this way, individuals who had not sexually abused another may have been classified as if they had.
Despite this final possibility, it seems likely that most misclassifications of perpetrator status would have been so as to under-estimate the proportion of subjects who went on to sexually abuse. It is not immediately obvious how these classification errors would have affected the interaction between the risk and protective indices. The problem is highlighted in the illustration of a typical significant interaction in Figure 8.1 below. This shows hypothetical perpetration outcomes in a significant interaction of subjects' exposed to different combinations of risk and protective factors.

![Graph of hypothetical perpetration outcomes in a risk x protection interaction](image)

In the typical multiplicative interaction between risk and protection, at low levels of risk we would expect there to be little difference in the likelihood of individuals becoming perpetrators of sexual abuse whether they had experienced a high degree of protection or a low degree of protection. At high levels of risk however, the likelihood of an individual becoming a perpetrator should be significantly reduced with the presence of protection. Thus, for a significant interaction to be found, we would need to identify a relatively high number of subjects exposed to high risk and low protection as perpetrators of sexual abuse. If errors in perpetrator classification underestimated the real number of perpetrators, it would be more difficult to identify this high number. Hence a significant interaction would be more difficult to establish.
With respect to those subjects exposed to high risk and high protection, there would need to be a low number of this sub-group identified as perpetrators for a significant interaction to be identified. The underestimation of perpetrators would therefore make such an interaction more likely. Furthermore, the paucity of protection identified in this study meant that there were relatively few subjects who experienced both high risk and high protection. The relative effects of such failures to identify members of these subgroups as perpetrators on the likelihood of identifying a significant interaction can only be guessed at. It is perhaps only possible to say that the misclassification of perpetrator status contributes to overall error, which may make the identification of significant interaction effects problematic.

A final matter to consider concerns the choice of factors that made up the protective index. This choice had been made on the basis of a review of the resilience literature, which had highlighted the importance of factors indicating positive relationships between maltreated children and non-abusive individuals who were significant to them, particularly attachment figures. Those factors included in the protective index were therefore selected, prior to any empirical analysis, on the basis of their relatedness to this concept.

It is possible that a different combination of factors might have proved protective against this outcome, although it is not immediately obvious what theoretical model might have informed this. An empirical approach might have been one possibility, such that only those factors that significantly interacted, or approached significance in their interaction with the risk index would be included in the protective index. This might have stood a better chance of being protective but would have been atheoretical and hence more difficult to account for.

8.3.5.2 Individual putative protective factors from the protective index

Of the seventeen regressions that were run (8 logistic without controls, 1 logistic with controls, 8 linear without controls) the interaction between the risk index and only one factor from the protective index, the longest period with the same carer, approached significance (p = .06). However, given the inherent difficulties in
obtaining significant interactions in non-experimental designs (McClelland & Judd, 1993) and the likely errors described in the previous section, it may be worth discussing this result a little further.

First, the protective nature of consistent, continuous care is also implied by other researchers. Falshaw and Browne (1997) suggest that children who are exposed to disruptions in care risk subsequently displaying anti-social behaviour. Furthermore, Widom (1991) suggests that adult offending by those placed in care as children is made less likely by a first placement lasting longer than ten years and by fewer moves to other placements.

Second, this result could be interpreted as representing support for previous research that indicated having a good relationship with a carer was protective against adverse outcomes following childhood maltreatment. For example, in a review of studies addressing the intergenerational transmission of abuse (Langeland & Dijkstra, 1995), two prospective studies were cited that identified ‘having an emotionally supportive relationship with one parent’ in child victims was associated with not abusing others when an adult (Egeland, Jacobvitz & Sroufe, 1988; Hunter & Kilstrom, 1979). The possible link between these variables is argued below.

The result relating to ‘longest period with the same carer’ seems to suggest that mere stability with one caring individual, whether abusive or not, is protective against the perpetrating outcome. However, it is likely that these long-lasting care relationships were in fact generally non-abusive. Following disclosure of abuse, the policy of social service departments was typically to separate the abuser from their victim in some way. In situations where one parent was abusive and was therefore excluded from the family home, any suggestion that the other parent had also abused the subject would have resulted in their removal also and the child being placed in care. The fact that a care relationship continued through such separations despite intensive investigations by social services suggests that the child’s relationship with the remaining parent was non-abusive, although it could also indicate that they were very skilled at hiding evidence from social services. Given the high involvement of social services in these families lives, it is likely that this would have rarely occurred.
It is possible, therefore, that having an extended, stable period of care with one carer might represent a proxy variable for having a good parental relationship. It had also been assumed that the closest proxy for this variable in the current study was having a non-abusive relationship with such a parent. Indeed, as discussed below (see Section 8.3.5.3) the number of non-abusive female primary carers pre six years old was found to be a protective factor in this study. Confirmation of the relationship between the longest period with the same carer and the number of non-abusive female primary carers pre six years old is that they were significantly correlated (r = .32, p<.01). It is likely these factors account for some shared outcome variance.

Speculation about how the result concerning the longest period with the same carer might be interpreted within an attachment theory framework may be premature, and this result should rather be interpreted with caution. When this variable was recorded it was not specified whether the caring individual was typically a father or a mother, nor their maltreatment status in relation to the subject. Although, having read and coded the files one was left with an extremely strong impression that it was the mothers who invariably were the carers who remained with the subjects, it would be necessary to establish this from the data. It would also be appropriate to establish whether these carers had abused the subjects in any way.

Using a significance level of p = 0.05 means, of course, that one regression in twenty will be significant simply as a result of chance. Leaving aside the fact that this interaction merely approached significance, it would be dangerous to conclude too much from this result, especially as when the control factors were included in the regression, the interaction fell well short of significance (p = .37). Probably the most that can be concluded is that stability of at least one carer cannot be discounted as a potential protective factor against the perpetrating outcome in persons at high risk.

8.3.5.3 Identification of Protective Factors not included in the Protective Index

Two of the three variables that attained or approached significance as protective factors related to the subjects having had non-abusive carers of both genders by the age of six. The result relating to female carers (β = -.24, p = .03) actually indicated that the number of non-abusive female primary carers experienced by the subject prior to his sixth birthday represents a protective factor against the development of
sexually abusive behaviour in sexually victimised males. Furthermore, the significance of the F-Change value \((p = .033)\) indicated that the interaction term added a significant amount of variance to the regression model. The change in \(R^2\) value of 0.04 shows that this interaction accounted for 4% of the variance in outcome, which is a considerable amount in a non-experimental research design (McClelland & Judd, 1993).

The specific variable relating to male carers that approached significance \((p = .10)\) as a protective factor was 'the number of sexually non-abusive male primary carers' (c.f. non-abusive male carers). This probably reflects the fact that very few subjects had a completely abuse-free relationship with their male carers and hence having a completely non-abusive father did not discriminate the perpetrators from the non-perpetrators. In other words, this result probably reflects the extreme nature of the sample. However, it may suggest that having positive male role models at an early age in life may warrant further investigation as a factor that reduces the risk of deviant behaviour by males maltreated in childhood. Indeed, the fact that results pertaining to relationships, up to the age of six, with both parental figures attain or approach significance may point to the protective importance of two factors for maltreated boys: the quality of relationships with one's parents; and stability and security in the early years of life.

There is some supportive evidence that variables similar to these factors might play a protective role in the context of sexual abuse. The strongest support is provided by the results of two studies mentioned above (Egeland, Jacobvitz & Sroufe, 1988; Hunter & Kilstrom, 1979) (see Section 8.3.5.2) in which an association was found between 'having an emotionally supportive relationship with one parent' as a child and not abusing others when an adult. These studies are particularly relevant because they directly addressed the outcome of abuse, albeit general maltreatment rather than specifically sexual abuse. However only compensatory effects were tested for. Evidence of interaction effects involving a similar variable was provided by Lam and Grossman (1997). Their protective index, including factors such as 'the subjects' attachments to their parents' and 'the quality of their relationships with their parents', significantly interacted with risk. This study did not test for the effects upon sexually abusive behaviour but on other psychological symptoms (e.g. depression,
sociability). However it may suggest the protective importance of these factors for maltreated individuals. Further studies have identified similar factors as compensatory variables only (Chandy, Blum & Resnick, 1996b; Spaccarelli & Kim, 1995) (see Section 4.3.1.3.1).

There are, however, provisos to the above results. Looking first at the variable, 'number of non-abusive female primary carers up to six years old', when a linear regression was run including the control factors, the interaction with the risk index was found to be non-significant (p = .12). Further, when a logistic regression was run including an interaction term between this factor and the risk index excluding control factors, the interaction was found to be non-significant (p = .17). Although Kessler (1983) suggests that under these circumstances it is appropriate to 'double-check' by running a linear regression (see section 5.10), it is not entirely clear how to interpret the result of this linear regression given that a significant interaction was found. Kessler suggests that one should examine whether one's theory about the link between risk and outcome might lead one to favour the linear model over the logistic one, or vice versa (Kessler, 1983 p.289). Given that this is not the case, no clear conclusion about this interaction can be made.

In relation to the interaction between the risk index and the number of non-sexually abusive male carers by age six, this interaction only approached significance without the inclusion of control variables. Once these were included the p value fell away (p = .24). In addition, the linear regression that was run excluding controls was highly non-significant (p = .46). Given the apparent 'precarious' natures of these interactions, it is hard to know how much store to put by them. However, together with the result concerning the longest period with the same carer, there does seem to be enough evidence to suggest that, in a highly maltreated sample, a non-abusive, good quality relationship with at least one carer in early childhood may reduce the risk of subsequent abusive behaviour in adolescence and adulthood.

A third interaction that approached significance was that between the risk index and a positive response to the subjects' disclosure of sexual abuse (p = .06 excluding controls, p = .10 with controls). This seemed to suggest that if the subject received a response to their disclosure, either through words or actions, that implied they had
been believed, the risk that they would subsequently abuse others may be reduced. The importance of such a positive response has been highlighted by many researchers (Bagley & Ramsey, 1986; Bentovim, 1991; Davenport, Browne & Palmer, 1994; Finkelhor, 1979). In the most recent of these (Davenport et al., 1994), a lack of familial support was perceived by their sample of sexual abuse victims as the most traumatising post-abuse outcome. In addition, Bentovim (1991) regarded the mother’s belief in the disclosure and the father taking full responsibility for his behaviour as essential to successful therapy and family rehabilitation.

However, when the interaction in this study was investigated further, the result appeared to be meaningless, with subjects who received a positive response being more likely to perpetrate subsequently. This is difficult to interpret according to any sensible theoretical framework and might instead be attributed to methodological error. For example, the social services and clinical files indicated that disclosure occurred in many different ways, not always directly from the subject himself. Thus for many subjects, this variable was not applicable. In the absence of evidence to the contrary, the measurement of this variable assumed that such individuals did not receive a positive response. There is likely to be a lot of error as a result of this assumption, and given the result of the interaction, it really is not clear what this variable is an index of. This explanation is supported by the fact that adequate inter-rater reliability was not achieved for trawling this factor (see Appendix 1). Thus it is likely that what was extracted from the files did not sufficiently represent the concept that this factor was designed to pick up.

However, Finkelhor (1979) casts a different light on this result. He suggests a possible scenario in which disclosing abuse to a non-abusive parent could, in fact, be more traumatic for the victim than if he had not disclosed at all. If, following the disclosure, the parent becomes hysterical, interrogates the child and perhaps even places some blame with him, it may be more upsetting for the child, even though the parent had obviously believed him, and may subsequently act to protect him. Finkelhor suggests that most parents are likely to respond in this way, thereby frightening rather than comforting the child.
The implication of the current finding is that individuals who disclosed would be more likely to experience adverse effects than those who did not. This does fit with Finkelhor's interpretation. The coding 'positive response to disclosure' was coded as present if there was evidence of belief or action to prevent subsequent abuse. This was because of the limited amount of information available in the files about this factor. Such coding does not take into consideration the child's experience of their parent's reaction.

However, this can only be considered as a tentative interpretation. The imprecise nature of the coding scheme for this variable is likely to be a cause of some error and caution must be applied to any conclusions from this result. Perhaps further research will be able to address this factor with more rigour.

8.3.5.4 Further methodological considerations
There are a number of more general points about the protective factor results that warrant some discussion. The first relates to the reliability and validity of the putative protective factors that were investigated. As the study was reliant on data from pre-existing files that were written without the study's aims in mind, there was some difficulty in identifying variables that might represent protective factors. This was particularly problematic because the social workers and clinicians who wrote the files in the 1980s seemed to have been focussed on recording risk factors to the exclusion of protective factors. Those factors that were recorded were often recorded inconsistently, and may have been defined in different ways in different documents. Thus, even though it was clear at the outset which variables should be investigated in this study, it was difficult to find information that related directly to some of them, or even to find a proxy variable.

It was these issues that led to the problems that arose around the trawling reliability (see Appendix 1). As a result of this lack of information on protection, it was a frustrating process to define certain variables in a way that represented meaningful protective concepts whilst at the same time being usable, given the restrictions in available data. In establishing trawling reliability, the definitions used for a number of putative protective factors lacked sufficient clarity. Thus is was decided to withdraw these factors from the process as insufficient data were available to derive
a reliability score. As reliability was not established for these factors, it is possible that they were not reliably trawled from the files, even though coding reliability was subsequently demonstrated. This possible error may have contributed to the overall dearth in significant protective factors that were found.

Furthermore, since information about protective factors was so sparse, there was no obvious way to validate the information that was given. This was more of a concern with some factors than with others, depending on how specific the coding criteria were. These criteria were created based on knowledge about the type of information contained within the contemporaneous files. For example, it was known (from reading other files) that there was typically very little information about whether a child had had a good relationship with an adult, other than their own parents. Hence the criteria for this factor were quite broad. A subject could be coded as having had a 'good relationship with an adult other than a carer' if his relationship with that adult was described as 'good' by any author of a document in the file, provided that this person had not been found to have maltreated the subject in any way. On a handful of occasions, a relationship between a subject and an adult was described as being 'good' by a social worker, but was later revealed to have been abusive. It is not known how widespread this problem was but it may have rendered several protective factor codings invalid. In the case of this factor, it may explain why it did not even approach significance in its interaction with the risk index. The same may have been true of other variables found not to be protective factors.

A second point relates to the investigation of what might be called 'passive' variables as protective factors, as proxies for 'active' ones. To explain these terms, 'passive' refers to factors that represent the absence of risk whilst 'active' would describe the presence of a positive factor. For example, the factor 'having a non-abusive female primary carer' would be termed a passive factor as it involves establishing carers who were non-abusive. This is a proxy variable for the active alternative, 'presence of a good female primary carer'. It is not necessarily the case that because the primary carer does not maltreat the child, that carer is 'good' for the child. It would have been preferable to use active protective factors but because of the limits of the data, a mixture of active and passive ones were investigated.
A third point relates to the fact that none of the putative protective factors investigated in this study were those of the 'steeling' variety. These are the sorts of factors, mentioned by Rutter (1985), which are normally perceived as having detrimental consequences, but that effectively act as an inoculation against further adversity. For example, it may be that if a person from a stable, non-abusive family experienced a relatively low severity of sexual abuse for a short period, he may as a consequence resolve never to inflict what happened to him onto anyone else. Thus experiencing maltreatment may result in 'steeling' the subject against the perpetrating outcome. However, it is very hard to hypothesise which variables might have this kind of effect.

A final point refers to the appropriateness of the study design to identify protective factors. There were several positive aspects to the design that were novel in this area of research, but the most significant was its catch-up longitudinal nature. This allowed the problems inherent with retrospective designs to be circumvented whilst at the same time avoiding the ethical difficulties of conducting a real-time longitudinal study, i.e. observing individuals develop into sexual abusers without intervening. Obtaining access to this unique sample was a major factor in facilitating this study at this time. To put it in stark terms, the early establishment of the child sexual abuse clinic at Great Ormond Street meant there was more time for individuals who had been referred to the clinic to develop a sexually abusive orientation, to act on this, and for this behaviour to be identified. However, this early establishment also meant that the clinic attracted some of the most severe referrals from around the country, as stated above. Hence it is questionable whether the results from this study are generalisable to the wider population of sexual abuse victims, including those less severe cases who come to the attention of official agencies, and the many cases whose experiences go either unnoticed or unreported.

8.4 Theoretical implications

Despite the equivocal nature of the results concerning stability of care and the number of non-abusive carers before the age of six (see Sections 8.3.5.2 and 8.3.5.3), it may be worth speculating about their meaning in a theoretical context. When taken
together these results may point to the protective importance of having at least one non-abusive primary caregiver in the early years of life. This is consistent with attachment theory (Bowlby, 1969), which suggests that the stability and quality of a person's attachment to their caregiver(s), especially at an early age, has an important effect on that person's subsequent mental health and behaviour. Bowlby hypothesised that a child's perception of the world, particularly the way they relate to other people, is based around the relationships they had with their early caregivers. Dependent on the way their carers respond to their needs, children build up an 'internal working model' of the world, which they use to relate to others and to predict their behaviour. Securely attached children who had responsive, reliable and caring parents would have built up a working model of their parents as loving and themselves as worthy of attention and love. Ainsworth (1982) referred to such individuals as having a 'secure base', a carer they could rely on whilst they explored their world. Bowlby suggested that they would carry these assumptions about themselves and others into further relationships. Insecurely attached individuals, however, would see the world as a dangerous place, treat others with mistrust and have a low opinion of themselves.

These internal working models are thought to be relatively stable and enduring. This is particularly the case for those assumptions that were built up in the early years of life, which are thought to be resistant to any positive or negative effects of subsequent experiences.

The above results could be interpreted in the context of attachment theory. It may be that having a female primary carer before the age of six who is non-abusive provides the opportunity for individuals to form a strong attachment with that carer, even for individuals who subsequently (or concurrently) experience maltreatment. Having a secure base like this may result in healthy internal working models that are protective against some of the possible adverse effects of maltreatment.

With regards to having a sexually non-abusive male primary carer before the age of six, this may also indicate a strong attachment between a subject and a father figure. For similar reasons as above, this may prove protective against the effects of maltreatment. The fact that having a completely non-abusive male primary carer...
before the age of six did not prove to be protective appears to contradict this interpretation. However, this may simply reflect the severe nature of the sample, as there were only 19/104 subjects who had non-abusive male primary carers whilst there were 53/104 subjects who had sexually non-abusive male primary carers. A low base rate of subjects with this factor would make finding a significant interaction more difficult.

The possible protective importance of having strong attachment relationships has significant implications for at least two of the theories described earlier to explain the development of sexual victimisation to perpetration (see Chapter 2). The first of these is the psychodynamic-based theory that the childhood victim develops a form of identification with his aggressor which increases the likelihood that he will sexually offend in the same way (see Section 2.2.1.1). However, it is important to note that this identification occurs in the context of a neglectful home, especially one in which the emotional needs of the male victim have been neglected by the sexually non-abusive parent(s) (Seghorn et al., 1987). Thus the child identifies with the one person who gives him attention, even if this frequently develops into sexual abuse. If the results of the current study do suggest the importance of early attachment relationships in preventing sexually abusive behaviour, they would provide some indirect support for the theory of identification with the aggressor. Although the presence of non-abusive attachment figures does not necessarily imply the emotional needs of the child will be fully met, this is at least more likely than in families where there is known neglect. It is therefore possible that, despite being sexually abused, individuals who also had at least one non-abusive parent would be more likely to have had their emotional needs met, thereby reducing their chances of identifying with their sexual aggressor. Subsequent research would need to establish more detailed evidence that the meeting of emotional needs was a significant factor in this process, either by attachment figures, or by the sexual aggressor. For example, it is not clear that all victims of sexual abuse who subsequently became perpetrators were emotionally nurtured in some way by their abusers.

A second theory that might be supported by the current findings is that described by Marshall (1989) and known as ‘intimacy theory’ (see Section 2.2.2.2). This involves the idea that individuals who are abused as children and who do not establish secure
attachment bonds with their parents through poor parenting are less likely to be able to form normal intimate relationships in adulthood. This leaves them at risk of seeking intimacy in other ways, perhaps sexually with children, of which they themselves have prior experience.

The current findings suggest the importance of non-abusive early parental figures, which are the closest variables that might indicate secure attachment bonds that were measured in this study. These are not ideal proxy-variables for a secure attachment, but in the context of an exploratory interpretation of the current results, it could be said that they provide partial support for intimacy theory. If indeed the presence of a non-abusive female primary carer is indicative of a secure attachment bond, it is possible that children growing up with such a figure might be better equipped to form intimate relationships in adult life. They might therefore be less likely to seek intimacy in more deviant ways. However, very much more research would need to be conducted to establish the validity of this theory. For example, it would be necessary to measure more accurately the nature of the attachment bond between all the childhood victims and their parents. Then the possible protective nature of this bond would need to be demonstrated in the context of abusive behaviour. The protective role of being able to form intimate relationships in adulthood would also need to be established before significant support could be said to have been found for this model.

An alternative theoretical model to explain these results could be found within a social learning framework (Bandura, 1977; Greenberg et al., 1993), which is described in Section 2.2.3.2. In brief, this involves the principle that behaviours are learned and that this learning is particularly strong when the behaviour is performed by key individuals, e.g. attachment figures. Furthermore, when this theory is applied to childhood victims of sexual abuse, these behaviours will be learned by young individuals who are unlikely to possess the maturity to regulate their own behaviour and are therefore more at risk of perpetrating abuse themselves.

Thus, with respect to the findings of the current research, it may be that being exposed to a male role model who is not sexually abusive, even if they have maltreated the subject in some other way, has a protective effect in the context of
being sexually abused by another person. Rather than learning the sexually abusive behaviour modelled by the perpetrator, the child victim might rather follow the example set by his own, sexually non-abusive father in the early years of his life. However, the presence of a sexually non-abusive father figure later in the child's life (i.e. after the age of 6 years) may not exert such a strong modelling effect on the child as a result of the learning that will have already occurred.

A further suggestion by Prentky et al. (1989) may also account for the importance of a non-abusive maternal figure in protecting against sexual perpetration by childhood victims of sexual abuse, as indicated by the current research. Prentky et al. (1989) suggested that poor quality early interpersonal relationships, particularly with the primary carer, coupled with the experience of sexual abuse may be important in explaining subsequent abusive behaviour (see Section 2.2.3.2). Thus, the presence in a child's early life of a non-abusive maternal figure may, in the context of sexual abuse, make subsequent sexually deviant behaviour less likely. Of course, as previously stated, having a non-abusive maternal figure does not necessarily imply the formation of a close attachment bond with her. However, it does at least provide more likely conditions for such a close relationship to develop between them.

It should be emphasised that these theoretical interpretations of the results are purely speculative and it is important to be extremely wary of drawing hard conclusions from the results of the current research. This is particularly the case when interpreting the results from the interactions between single putative protective factors and the risk index. It was demonstrated in Table 7.3 (see Chapter 7) that several of these factors were significantly correlated. It is therefore difficult to establish which factor is most important in protecting against the perpetration outcome. Before this is certain, theoretical interpretations may be a little premature.

8.5 Clinical implications

As has been stated above, the results of this study do not allow categorical conclusions to be drawn. The fact that only one interaction was statistically significant could be interpreted as being due to chance, as around thirty were run in
all. However, given the difficulty in obtaining significant interactions in non-experimental designs combined with the particular errors inherent in the current design, it could be speculated that this result and the interactions that approached significance were indications of protective factors in this context.

It is typically appropriate to be conservative in one's conclusions and the evidence may not be strong enough to say, unequivocally, that having a non-abusive female primary carer before the age of six is protective against the development of sexually abusive behaviour in sexually victimised males. Furthermore, all other interactions were either highly non-significant or only approached significance. When the control variables were added, though, only one variable actually approached significance (positive response to disclosure) and this was largely discredited following further investigation.

On the other hand, many of the positive results are consistent with attachment theory and with the results of other studies (Chandy, Blum & Resnick, 1996b; Lam & Grossman, 1997; Spaccarelli & Kim, 1995). For example, in addition to the significant interaction, the factors that approached significance in this study were related to attachment concepts (longest period with the same carer, number of sexually non-abusive male primary carers by age 6). Thus it may be too harsh to dismiss the possibility that these variables may be protective factors against a perpetrating outcome in male victims of sexual abuse. Given the preliminary nature of the research and the fact that it is the first longitudinal study to investigate this subject, it is important not to make Type II errors.

If we were to speculate that the quality of a child's early attachment relationships is important in reducing the risk of a perpetrating outcome, it might be appropriate to give particular clinical input into parents of high risk children. This might involve advice on parenting or facilitating their relationships with their children in other ways. Perhaps there should be a more general pre-emptive focus on the education of parents-to-be in parenting skills, and the possible effects of sub-optimal caring. Of course, a less promising implication of the above result would be that children whose experience of abuse was not disclosed until they were over six years old could not be helped in this regard. However, the amount of error that is likely to have resulted
from the methodological limitations of this study means that one cannot categorically say there are no other protective factors against the perpetrating outcome for individuals abused at such an early age. In addition, there are possible interventions for such individuals that help them to establish strong attachments to other individuals. These would centre around helping the individual to learn to trust others, including adults, and especially adult carers. This may be supported by a placement with experienced foster carers.

It may also be helpful to consider possible treatments that arise out of the developmental theories that are influenced by the attachment model, i.e. identification with the aggressor (Seghorn et al., 1987) intimacy theory (Marshall, 1989) and social learning theory (Greenberg et al., 1993). For example, Laws and Marshall (1990) suggested a possible mechanism based in social learning theory that involved the victim of sexual abuse ‘labelling’ himself as sexually deviant from an early age, as a result of misattributions of blame surrounding his victimisation (see Section 22.2.2.2 for more details). The former victim of abuse may then be more likely to translate the label into abusive actions. This theory suggests that an appropriate intervention might involve addressing the child’s attributions of responsibility as early as possible, providing an explanation of the perpetrator’s behaviour and teaching age-appropriate norms of sexual behaviour (Wheeler & Berliner, 1988).

On the basis of intimacy theory, it might be suggested that an abused individual should be given focussed attention on social skills, to enable him to form normal intimate relationships rather than relying on relationships with children. Meanwhile, treatments arising out of more psychodynamic theories have centred on the maltreated individual managing their unconscious identification with both the victim and the victimiser (Kernberg, 1994) and establishing a better sense of boundaries (Zamanian & Adams, 1997). However, as discussed in Chapter 2, there are no data to support the effectiveness of any of these interventions.

A final clinical implication is one that would assist further investigations into this subject. This would involve mental health professionals and others working with such cases to more systematically record data on factors that might prove protective.
against a range of outcomes. This in turn would result in a reduction in error for the measurement of these factors in subsequent research.

8.6 Future research

A number of lines of future enquiry with respect to protective factors are possible following the current study. These will be suggested within the framework of developmental psychopathology that informed the current research. This approach is described above in some detail (see Section 2.4). However, by way of a brief reminder, the key areas of interest to developmental psychopathologists include the importance of making an assessment over time, the identification of both risk and protective factors which significantly contribute to outcome, the careful analysis of groups who do not fit the hypothesised pattern, and the consideration of the interaction between risk and developmental stage.

First, with respect to making an assessment over time, the current research does represent a longitudinal approach to the identification of risk and protective factors for the development of sexually abusive behaviour. However, the time span over which the research was conducted was limited. It is possible that a number of individuals categorised as non-perpetrators will subsequently manifest abusive behaviour. It would be valuable, therefore to conduct research over a longer period for a more valid identification of protective factors to be carried out. In addition, a more thorough investigation than was possible in the current study might be attempted to establish how the identified risk factors interact with developmental changes in the maltreated person’s life. For example, it could be investigated whether the ages at which different forms of abuse first occur have any effect on the perpetration outcome.

Second, with regards to the identification of risk and protective factors, there were a number of important gaps in what was possible to investigate, given the limitations of the sources of data. It may be possible in subsequent studies to investigate a number of these potential risk and protective factors. For example, it may be that given the increase in awareness of, and research into protective factors in the 1990’s,
clinicians and social workers might have been more attentive to such factors in maltreatment cases. Thus it may be possible that a catch-up longitudinal study along similar lines, conducted in five to ten years, might be more successful in identifying protective factors.

Irrespective of whether such a study might be possible given the current attention paid to protective factors by clinicians and social workers, such individuals should be encouraged to record more information about these factors, as mentioned in the previous section. Given the results of the current study, a particular focus might be placed on the nature of the attachments between maltreated children and their primary carers in the early years of life. Subsequent studies investigating the importance of the factors would be more confident in the validity of measures based on detailed information recorded at the time. The relative lack of error, compared to the current study, would be more likely to identify any significant results.

A final point relating to the investigation of different putative protective factors against the development of sexually abusive behaviour centres on the concept of 'steeling'. This process, mentioned above, is one in which a variable that typically has a mild to moderate negative outcome has an inoculating effect against the effects of a more deleterious factor. This concept might be a rich source of a number of different ideas for putative protective factors, the inclusion of which in a future study might be fruitful to investigate.

A further important focus of the DPP approach is the study of sub-groups who do not fit the hypothesised pattern. There may be considerable insights to be gained from studying those individuals who were not sexually abused in childhood and yet developed a sexually abusive pattern of behaviour. It is hard to conceive of anything other than a retrospective design with this group, however, as it would be difficult to identify them prior to the onset of their behaviour.

In addition, it is important to recognise that the mere identification of protective factors, although difficult in itself, is only part of the story. Rutter (1985) highlighted the importance of investigating the protective processes, the means by which the factors have their effect and this is emphasised in the approach of developmental
psychopathology (DPP). Furthermore, the identification of these protective processes should be informed by appropriate psychological theory, which would allow the protective factors identified by such research to be placed within a psychological framework. A number of these have been suggested above and include identification with the aggressor (Seghorn et al., 1987) intimacy theory (Marshall, 1989) and social learning theory (Greenberg et al., 1993). Future research could involve establishing further evidence for the validity of these theories. For example, mechanisms such as 'self-labelling' (Laws & Marshall, 1990) could be investigated that attempt to explain how individuals learn deviant behaviour and translate that learning into actions.

A further line of enquiry could centre on establishing the effectiveness of interventions, including establishing subsequent outcomes and mechanisms of change. If protective factors are to be introduced into the lives of individuals at risk of developing abusive behaviour, it is important to know how they will have their positive effect so as to ensure this occurs and to avoid any deleterious outcomes. It may also be possible in future longitudinal research to chart how these protective processes might change over time.
Appendices
Appendix 1  Inter-rater reliability

A1.1 Introduction

Despite the many advantages of the catch-up longitudinal design highlighted in Chapter 5, a central problem for this method is that the information on which codings are made is not collected with the research question in mind. As described in Chapter 6, the sources of data on the risk and protective factors were contemporaneous clinical and social services files. Neither of these records were designed to be used for research purposes. In these case files, the relevant information was not collected in one place, was not recorded in an easily identifiable format, and information that would help clarify a particular coding might not have been present.

This raised a potential problem of inter-rater reliability. The catch-up design can only be of use if it can be established that the case material, with all its faults, can be translated into reliable quantitative scores. This appendix discusses the particular issues that were pertinent to the establishment of reliability, the methods used to do this, and the results of the reliability analyses.

A1.2 Reliability issues

As described in Chapter 6, in order to translate the case material into quantitative scores, it was necessary for the trawler to read the files and extract appropriate information on each factor. The coder would then scan these quotes and use them to make a quantitative coding.

Although this procedure made the use of a catch-up longitudinal design possible in this study, this process carried with it considerable opportunities for unreliability. A
number of potential barriers had to be overcome before reliable coding was possible. For example, information relevant to the coding of each factor had to be extracted in a consistent way. In addition, establishing the perpetration status of the subject and, where necessary, the date of onset of perpetration had a crucial bearing on the reliability of any coding. These had to consistently accurate, therefore. Finally, the coding of the extracted data had to be done in a standardised way.

A further issue to be considered related to the volume of material that it was necessary to read to maximise the validity of the coding. For many of the subjects, their social services files ran to 10 volumes. As well as these there were also clinical files for each subject. Given time and financial constraints, this necessitated a team of up to five researchers. However, this also meant that all five would need to learn to trawl and code the data in the same way. Inter-rater reliability would be required for these five team members.

Lastly, it should be highlighted at this point that six factors (2 risk, 4 protective factors) that were used in the final analysis were not assessed for trawling reliability. This relates to the fact that trawling reliability was assessed over a year before the final analysis was completed. During the intervening period, simplifications were made to the definitions of some of the factors under investigation to facilitate their inclusion in some regard (albeit crude) in the project. The implications of this will be discussed in the summary at the end of this appendix.

**A1.3 Method**

Inter-rater reliability was assessed in two stages. In the first stage the inter-rater reliability of the trawling of information from the case files was assessed. This assessment took place before the researchers began extracting information from the case files. After the information had been extracted from the clinical and social service files of all the subjects, some 12 months later, the inter-rater reliability was assessed.
with which this information was scored. An additional reason for conducting reliability at two time points was that the data collection carried on over a long period of time, because of the voluminous case material. Establishing reliability before the extraction procedure began does not ensure reliability 12 months later, when the scoring stage began.

A1.3.1 Statistical analysis of inter-rater reliability

The reliability of dichotomous variables were analysed using Cohen’s kappa. For a dichotomous variable to be considered reliable, a kappa of at least 0.5 was needed.

In the reliability analysis, no continuous measures met the parametric assumption of normality. Non normality was caused by a high proportion of subjects scoring 0 and so transformation could not be used to normalise the data. All continuous measures were therefore analysed using Kendall’s tau-b. A value of 0.60 was required for acceptable reliability.

Kendall’s tau-b is a measure of association rather than a measure of reliability. For example, if one researcher scores exactly twice the value of whatever another researcher scores, this would represent a perfect association, but indicates little if any inter-rater reliability. To address this, the data were analysed using intraclass correlations.

A1.3.2 Reliability of trawling case material

Although the aim of this first stage was to assess the inter-rater reliability with which information was extracted from case files, it is difficult to envisage how the reliability of extraction could be assessed independently of the reliability of scoring. To test whether two researchers extract the same type of information it is necessary to score that information, and compare the reliability of these two scores. The only other possibility would be to directly compare the quotes extracted in each case. However,
this approach was not appropriate for this research study, because it would be possible to extract different quotes referring to the same event or experience, and therefore still produce the same scores. The analysis of trawling reliability is necessarily an assessment of both trawling and coding.

The stage of trawling reliability was also designed to assess whether the division of trawling and coding tasks that had been implemented to minimise bias (see Section 6.3.4) was practicable. This division of tasks posed particular problems for the coder, as s/he had to code without the benefit of background information gained from reading the file in its entirety. It was possible that important pieces of contextual information, not contained in the quotes, but provided by reading the file, would not be available to the researchers coding the case material. The manual provided advice to the trawler on when additional contextual information would be needed by the coder, but it was still necessary to establish that information could be coded in the absence of this background information. This was assessed by examining two codings, one made by a researcher who had also extracted the information from the file (‘trawl and code’ task) and one made by an individual who had not (‘code-only’ task). The ‘code-only’ task was made on the basis of material extracted by a third researcher (‘trawl-only’ task). If acceptable reliability ratings could be achieved using this division of tasks, it would give some indication that successful codings could be made in the absence of background information. It should be emphasised, then, that as the two coders were working from different knowledge bases, it provided a particularly stringent test of reliability.

Reliability was assessed using the files of 18 subjects selected at random from the sample. Initially, three researchers, including the author, were involved in the trawling and coding of files. Each one of the three researchers was assigned at random to both trawl and code six files, trawl six files without coding (trawl-only) and code six files without having trawled them (code-only). Assignment to the tasks was made so as to ensure that each combination of the researchers’ tasks was performed, and these were done an equal number of times.
At a later date, two additional researchers were introduced. It was not possible to ensure that each of the five researchers stood in exactly the same number of relationships to each other in terms of the three tasks. An attempt was therefore made to assess the reliability of the two new researchers’ trawling and coding against a randomly selected combination of the original three researchers.

Half of the original 18 files were selected at random. For these nine cases, the scores from the ‘trawl and code’ task of the original researcher who had worked on each of these files were used. The two additional researchers were then randomly assigned to the two remaining tasks (trawl-only and code-only). For the remaining nine files, the two new researchers were randomly assigned to the ‘trawl and code’ condition. The other new researcher was assigned to the code-only task, and coded the material that had previously been extracted by one of the three original researchers.

Table A1: Trawling reliability for outcome and risk factor variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Three researchers (kappa)</th>
<th>Five researchers (kappa)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual perpetration</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Risk factors:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child sexual abuse</td>
<td>1.00</td>
<td>0.82</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>0.67**</td>
<td>0.89</td>
</tr>
<tr>
<td>Witnessing intrafamilial physical abuse</td>
<td>0.77</td>
<td>0.77</td>
</tr>
<tr>
<td>Neglect (failure to provide)</td>
<td>0.57</td>
<td>0.82</td>
</tr>
<tr>
<td>Neglect (lack of supervision)</td>
<td>0.82</td>
<td>1.00</td>
</tr>
<tr>
<td>Rejection by carers</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Abused by a female</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Discontinuity of care</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

All variables significant at $p < 0.001$, unless otherwise stated. ** $= p < 0.01$
All variables tested reached acceptable levels of inter-rater reliability (Kappa > 0.5) with most achieving good to excellent agreement. The variables ‘rejection by carers’ and ‘sexually abused by a female’ had not been included in the study at the time of trawling reliability and hence were not tested.

Table A2: Trawling reliability for protective factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Researchers assessed</th>
<th>Three researchers</th>
<th>Five researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuity of care:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistent carer</td>
<td>6 m. - 5 yrs old (k)</td>
<td>0.68**</td>
<td>0.60**</td>
</tr>
<tr>
<td></td>
<td>6 m. - 10 yrs old (k)</td>
<td>0.88</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>6 m. - 16 yrs old (k)</td>
<td>1.00</td>
<td>0.77</td>
</tr>
<tr>
<td>No. of care units (score) before 5 yrs old (tb)</td>
<td></td>
<td>0.96</td>
<td>0.99</td>
</tr>
<tr>
<td></td>
<td>10 yrs old (tb)</td>
<td>0.88</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>16 yrs old (tb)</td>
<td>0.82</td>
<td>0.95</td>
</tr>
<tr>
<td><strong>Foster care:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years in foster carer by age 10 (tb)</td>
<td></td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Years in foster carer by age 16 (tb)</td>
<td></td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Other factors:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment (k)</td>
<td></td>
<td>0.64**</td>
<td>0.61**</td>
</tr>
<tr>
<td>Good relationship with adult (k)</td>
<td></td>
<td>0.78**</td>
<td>0.75**</td>
</tr>
<tr>
<td>Non abusive male carer – 6m. to 5 yrs (tb)</td>
<td></td>
<td>0.61**</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>6m. to 10 yrs (tb)</td>
<td>0.66**</td>
<td>0.87</td>
</tr>
<tr>
<td>Non abusive female carer – 6m. to 5 yrs (tb)</td>
<td></td>
<td>0.78**</td>
<td>0.67**</td>
</tr>
<tr>
<td></td>
<td>6m. to 10 yrs (tb)</td>
<td>0.78**</td>
<td>0.78**</td>
</tr>
<tr>
<td>Social acceptance</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Good relationship with sibling</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Positive response to disclosure (k)</td>
<td></td>
<td>0.40*</td>
<td>-</td>
</tr>
<tr>
<td>Positive court experience</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

All variables significant at p<.001, unless otherwise stated: * = p<.05; ** = p<.01

Acceptable levels of reliability were attained for all the variables tested except ‘positive response to disclosure’. The variables for which no reliability ratings have been given had too many missing scores for a meaningful reliability to be calculated. This was largely due to a lack of clarity in the parts of the trawling and coding manual.
that related to these variables at the time of testing. No attempt was made to code 'positive response to disclosure' with five researchers once the reliability had been found unacceptably low for the original three.

A1.3.3 Reliability of coding the case material

Although five researchers were involved in the extraction of the case material, only four were involved in the scoring. In this stage of the reliability procedure, 20 cases whose clinical and social service files had both been trawled were selected at random. Each one of the four researchers coded each one of the 20 files.

Reliability estimates were calculated separately for each possible pairing of researchers (i.e. Researcher A and B, A and C, A and D, B and C, B and D, C and D). The same statistical analyses and reliability criteria were used in the coding reliability as in the trawling reliability. The coding reliabilities for outcome, risk and protective factors are contained in tables A3 and A4 below.

Table A3: Outcome and Risk factor coding reliability for each pairing of four researchers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Researcher pairing reliability (k)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A-B</td>
</tr>
<tr>
<td><strong>Outcome:</strong></td>
<td></td>
</tr>
<tr>
<td>Sexual perpetration</td>
<td>0.89</td>
</tr>
<tr>
<td><strong>Risk Factor:</strong></td>
<td></td>
</tr>
<tr>
<td>Child sexual abuse</td>
<td>0.44*</td>
</tr>
<tr>
<td>Experiencing physical abuse</td>
<td>1.00</td>
</tr>
<tr>
<td>Witnessing intrafamilial physical abuse</td>
<td>0.69</td>
</tr>
<tr>
<td>Neglect (failure to provide)</td>
<td>0.90</td>
</tr>
<tr>
<td>Neglect (lack of supervision)</td>
<td>0.90</td>
</tr>
<tr>
<td>Rejection by carers</td>
<td>0.70</td>
</tr>
<tr>
<td>Sexually abused by a female</td>
<td>1.00</td>
</tr>
<tr>
<td>Separations</td>
<td>1.00</td>
</tr>
</tbody>
</table>

All variables significant at p < 0.001, unless otherwise stated. * = p < 0.05
<table>
<thead>
<tr>
<th>Variable</th>
<th>Researcher pairing reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A-B</td>
</tr>
<tr>
<td><strong>Continuity of care:</strong></td>
<td></td>
</tr>
<tr>
<td>Longest time with same carer ($t_6$)</td>
<td>.790</td>
</tr>
<tr>
<td>No. of care units before 6 yrs ($t_6$)</td>
<td>.891</td>
</tr>
<tr>
<td>No. of care units before 12 yrs ($t_6$)</td>
<td>.728</td>
</tr>
<tr>
<td><strong>Foster care:</strong></td>
<td></td>
</tr>
<tr>
<td>Time in non-abusive foster care ($t_6$)</td>
<td>.800</td>
</tr>
<tr>
<td><strong>Other Protective factors:</strong></td>
<td></td>
</tr>
<tr>
<td>No. of non-abusive female primary carers up to 6 yrs old (k)</td>
<td>.688**</td>
</tr>
<tr>
<td>No. of non-abusive female primary carers up to 12 yrs ($t_6$)</td>
<td>.716</td>
</tr>
<tr>
<td>No. of non-abusive female primary carers up to 16 yrs ($t_6$)</td>
<td>.858</td>
</tr>
<tr>
<td>No. of non-abusive male primary carers up to age 6 yrs ($t_6$)</td>
<td>.860</td>
</tr>
<tr>
<td>No. of non-abusive male primary carers up to age 12 yrs ($t_6$)</td>
<td>.878</td>
</tr>
<tr>
<td>No. of non-abusive male primary carers up to age 16 yrs ($t_6$)</td>
<td>.885</td>
</tr>
<tr>
<td>No. of sexually non-abusive female primary carers up to age 6 yrs ($t_6$)</td>
<td>1.000</td>
</tr>
<tr>
<td>No. of sexually non-abusive female primary carers up to age 12 yrs ($t_6$)</td>
<td>1.000</td>
</tr>
<tr>
<td>No. of sexually non-abusive female primary carers up to age 16 yrs ($t_6$)</td>
<td>1.000</td>
</tr>
<tr>
<td>No. of sexually non-abusive male primary carers up to age 6 yrs ($t_6$)</td>
<td>1.000</td>
</tr>
<tr>
<td>No. of sexually non-abusive male primary carers up to age 12 yrs ($t_6$)</td>
<td>.946</td>
</tr>
<tr>
<td>No. of sexually non-abusive male primary carers up to age 16 yrs ($t_6$)</td>
<td>1.000</td>
</tr>
<tr>
<td>Subject received treatment (k)</td>
<td>1.000</td>
</tr>
<tr>
<td>Good relationship with an adult (k)</td>
<td>1.000</td>
</tr>
<tr>
<td>Good relationship with sibling (k)</td>
<td>.783</td>
</tr>
<tr>
<td>Good relationship with a peer (k)</td>
<td>.773</td>
</tr>
<tr>
<td>Positive response to disclosure (k)</td>
<td>.604**</td>
</tr>
<tr>
<td>Perpetrator convicted (k)</td>
<td>.608**</td>
</tr>
</tbody>
</table>

All variables significant at p<.001, unless otherwise stated: * = p<.05; ** = p<.01; n.s. = not significant (p >.05).
The vast majority of variables reached acceptable levels of inter-rater reliability (Kappa > 0.5, Kendall's tau-b > 0.60).

A1.4 Summary

The reliance on case material gathered for reasons other than the research questions raises a particular problem for reliability in the catch-up longitudinal design. The case material is not collected in a systematic way and is not always easily identifiable. Unless it is possible to reliably trawl and code this material the catch-up design is likely to be an ineffective strategy. To address this potential problem in the research reported in this thesis, reliability was assessed at two stages: the first stage examined the reliability with which information was trawled from the case files, the second state examined the reliability with which information was coded. Acceptable levels of reliability (kappa > 0.5; Kendall’s tau-b >0.60) were reached for the vast majority of variables.

The fact that acceptable levels of trawling reliability were not attained for six of the variables that were part of the final analysis is obviously not ideal, even though acceptable levels of coding reliability were attained for these factors. It means we cannot be sure that information relating to these factors was reliably extracted from social service and clinical files, although we can be relatively confident that once extracted, it was reliably coded. Given the rarity of the sample under investigation and the possible importance of these factors, it was considered appropriate to continue to include them in the analysis, whilst at the same time bearing in mind the unreliability of trawling these factors.
Appendix 2: Trawling and Coding Manual

Contents

Trawling Guidelines:

Stage 1: Before file trawling 288
Stage 2: Completing the onscreen cover sheet 288
Stage 3: Reading the file and extracting quotes 288
Stage 4: Construction of a care table 290

General Coding Guidelines:

Levels of certainty 293
The role of the Perpetrator Coder 294
Onset of Perpetration or Sexualised Behaviour 301
Risk and Maltreatment Factors:

Child Sexual Abuse 303
Subject as a Perpetrator of Sexual Abuse 308
Experiencing Physical Abuse 314
Witnessing Intrafamilial Physical Abuse 320
Neglect - failure to provide 327
Physical Neglect - Lack of Supervision 333
Rejection by carers 338
Discontinuity of Care 342

Protective Factors:

Continuity of Care 346
Non-abusive Primary Carers 347
Treatment History 349
Good Relationship with an adult 351
Good Sibling relationship 352
Good Peer relationship 354
Responses to Disclosure 355
Trawling Guidelines

This section provides directions to enable the researcher trawling the file to correctly extract the relevant information from the file necessary for coding. The process of file trawling consists of four stages:

- Stage 1: Before file trawling
- Stage 2: Completion of the onscreen front sheet
- Stage 3: Reading the file and extracting quotes
- Stage 4: Construction of a care table.

Stage 1: Before file trawling

Before beginning the file trawling process it is essential that this document is read in its entirety. The trawler must not only be familiar with the information discussed in this trawling section, but must also be familiar with contents of the coding sections, including the contents of each of the risk factor chapters. Coding can only be made if a series of criteria are met, it is crucial that the trawler is aware of these, and extracts the necessary information if it is contained in the files. Before trawling the researcher should be entirely conversant with the following areas:

- The Trawling Guidelines
- The General Coding Issues
- The risk factors of interest
- The definitions for that factor
- Other information relevant to making a dichotomous coding (e.g. perpetrator criteria, entering information in the correct factor guidelines)

Stage 2: Completing the onscreen cover sheet

Refer to the General Coding Guidelines for full details, under the heading ‘Role of the perpetrator coder’.

Stage 3: Reading the file and extracting quotes

The file should be read word for word and in a chronological order. The majority of the file is likely to consist of reports or documents in either hand written or typed format, and these should be read in full. An attempt should be made to read all hand written documents, even if the handwriting is difficult to interpret.

The trawler should read the file until a quote of interest is reached. A quote of interest is defined as one which the trawler thinks may change any scoring assigned to a subject.

The next step is to determine whether the quote meets the criteria for extraction. In general, the trawler should extract any quote that s/he feels will change the coding, and should also extract a quote if s/he is unsure about whether the quote would affect the scoring. The general rule is: If in doubt, extract the quote.

However, the trawler should no extract a quote if the same piece of information had already been extracted, and the scoring would not be affected by the additional quote. (E.g. Quote already in the database: ‘The children’s clothes are unclean but adequate’; New quote: ‘Both boys were dressed in dirty clothes’. The new quote would not be recorded.)

This final point is designed to limit the amount of information extracted by the coder. It is important to note the following caveats to this rule:

Source of authority

If the source of the information is more authoritative, then the quote should be extracted, even if it refers to the same information. An ‘authority table’ exists to guide this decision (see below).
The authority table

<table>
<thead>
<tr>
<th>Authority level</th>
<th>People</th>
</tr>
</thead>
<tbody>
<tr>
<td>High authority</td>
<td>Psychologists, Psychiatrists, Psychotherapists, Psychiatric social workers, Social worker</td>
</tr>
<tr>
<td></td>
<td>Subject</td>
</tr>
<tr>
<td>Low authority</td>
<td>All others, including results of court cases, lawyers and other members of the judiciary, police officers, and putative perpetrators</td>
</tr>
</tbody>
</table>

The trawler should extract information if the source of authority is a clinician or social worker, even if the same information has been reported by the subject, or anyone else. In the same way, the trawler should extract information when the source is the subject, even when the same information has been reported by anyone else other than clinicians or social workers.

Example
Quote already in the database: ‘In my opinion X has been physically abused’ (Comment by teacher) New quote: ‘In my opinion X has been physically abused’ (Comment by a psychotherapist)
The new quote would be recorded.

Contradictory information
Information that contradicts extracted information is also to be extracted. If a perpetrator of any type of abuse, or an individual who colludes in the abuse (e.g., a non intervening main carer) contradicts another individual’s opinion by claiming that the abuse did not occur, extract this as we are interested in the responses of these individuals. However the coder should not take such comments as indicative of the first report being false. If the perpetrator admits to the abuse at any point, this admission is also to be extracted.

Veracity of allegation
The opinion of a professional as to the veracity of an allegation and a professional reporting an allegation without commenting on its veracity are not to be considered the same type of information. (E.g., ‘The child alleges that he was forced to masturbate the father’; ‘There is no doubt in my mind that the child’s allegation are true.’) The opinion of the professional provides vital evidence that the event did or did not occur, but a report of an incident without an opinion often contains important details about the experience, such as severity and duration.

If the quote meets the criteria for extraction then it is to be typed on screen. In addition to the quote, three additional pieces of information are required:

The source of the information
It is important to include their position/status.

The date of the document from which the quote is taken

Other information necessary for understanding the meaning and the coding of the quote
This will often be needed to identify the referent of a pronoun. (E.g. ‘His father used to hit his brother and he used to hit him.’ This sentence contains four pronouns, the identity of the referent of each is needed if the coder is to understand who was being violent and who experienced violence.) It is difficult to specify what additional information will be needed in all circumstances, but two important pieces of evidence to record are detailed below (‘contact’ and ‘continued contact’). As a general rule, to ensure sufficient contextual information has been recorded: establish what you understand by the quote, reread the quote, and then check that you could arrive at the same understanding without additional information. Remember that if any additional contextual information is recorded be sure to make it distinguishable from the evidence item by placing [square brackets] around it.
Continued contact
If an individual becomes a primary carer for the subject in the first three years of life and is still a primary carer when the subject turns three, then in the event of a subsequent separation between the two, all continued contact between them should be recorded. This should be entered in the notes column of the care table, for each care unit that contact remains in place. This will enable us to ask whether there has been a consistent carer in the subject’s life. Continued contact with other individuals, whether or not they are primary carers, need not be recorded.

Stage 4: Construction of a care table

The trawler is responsible for extracting quotes relevant to the subject’s care history, and using this information to generate a care table for the subject. The completed care history provides a ‘time line’ that can be referred to for an overall view of the subject’s life.

Definitions

Main caregiver
A person who has ultimate responsibility for the subject or who shares this responsibility with one other person. For example, biological father/mother, foster father/mother, adopting father/mother, stepfather/mother, grandfather/mother.

The following are additional aspects of the main carer role:

- This role can pass from one person to another as people leave and enter the subject’s life.
- If a subject moves from one main caregiver or set of main caregivers to a completely different set, then the new carers are main carers from day one. (E.g. Subject lives with mother, social services move the child to a foster family. The foster family are main carers from day one.)
- If the subject is living with a main caregiver, and a partner of the main caregiver begins to live with them, then the new individual must be present for one month or more before they are defined as main caregiver. However, once a person has cared for the subject for a month or more, and has become a main carer, that person is assumed to have been a main carer from the first day they began to live with the subject. Any calculation of duration is to be taken from the first day the subject began to live with the subject. (E.g. The mother is living with the subject, a boyfriend of the mother moves in on 1 January 1986. The boyfriend remains there until 2 November 1986. Once the boyfriend has lived there for a month, he becomes a main carer, and is assumed to have been a main carer since 1 January 1986.)
- A partner of a main caregiver cannot achieve either main carer or primary status on a cumulative basis. The carer has to have been caring for the subject continuously for a month.
- If a partner of a main caregiver achieves main carer status at some point in the child’s care history, they maintain this status throughout the span of the child’s history. For example: if a partner of a main caregiver leaves a care unit, and then resumes caring for the child in a later unit, they would automatically achieve main carer status in this new unit.
- If a subject lives with several people, say his mother and both grandparents, the main carer must always be assumed to be the closest familial relation to the subject, i.e. in this example, the mother. Grandparents represent closer relations than uncles or aunts, who in turn are closer than all other family relations, which are finally closer than non-relatives.
- If several uncles and aunts are looking after the subject and it is not clear which is taking main responsibility, select the eldest uncle/aunt and spouse (if there is one) as the main carers. It is expected that the person taking ultimate responsibility will usually be made apparent by the social worker or psychiatrist.
- It is possible for both main carers to be of the same sex.

For the purpose of generating the care table, the rule is to use a very wide definition of carer. This wide definition will provide a detailed timeline, which will be useful for timeline based codings.

Primary Carer
A primary carer is a main carer who has cared for the subject for one year or more.

The following are additional aspects of the primary carer role:
• If the subject is living with a primary caregiver, and a partner of the primary caregiver begins to live with them, then the new individual must be present for one year or more before they are defined as a primary caregiver. However, once a person has cared for the subject for a year or more, and has become a primary carer, that person is assumed to have been a primary carer from the first day they began to live with the subject. Any calculation of duration is to be taken from the first day they began to live with the subject. They become a primary carer (see definition) when they have lived with the subject for a year, not a year and one month. (E.g. The mother is living with the subject, a boyfriend of the mother moves in on 1 January 1986. The boyfriend remains there until 2 January 1987. Once the boyfriend has lived there for a month, he becomes a main carer. However, since he cared for the subject for one year, he counts as a primary carer. He therefore is assumed to have been a primary carer since 1 January 1986)

• If a carer achieves primary carer status at some point in the child’s care history, they maintain this status throughout the span of the child’s history. For example: if a primary carer leaves a care unit, and then resumes caring for the child in a later unit, they would automatically achieve primary carer status in this new unit.

• A carer cannot achieve primary carer status on a cumulative basis. The carer has to have been caring for the subject continuously for a year, or any separations during this year are for under one month.

Care Unit
A care unit refers to a period of care of the subject by the same person or pair of people meeting the definition for main carer or primary carer, which lasts at least one month. Any change in the carers within one unit, whether an addition or subtraction, constitutes the end of that care unit. This change may also constitute the start of a new care unit provided that this new care arrangement goes on to last at least one month.

If a subject spends part of, or even a complete school holiday away from his current carers, e.g. with his father who is divorced from his primary caring mother, this is not to be recorded as a new care unit.

If a subject lives at boarding school but returns to the care of others either at weekends or during holidays, his carers are to be considered the adults who have care responsibility at the place he returns to, rather than the proprietors of the boarding school. These adults were often his carers before he went away to boarding school, e.g. his parents. However it is possible that the parents were denied access to the subject once he went to boarding school and thus the subject either went to foster parents during the holidays or to a care home. Under these circumstances, the subject’s carers would be assumed to be the people to whose care the subject returned during the holidays or at weekends, i.e. the foster parents or the director of the care home.

Separation
For the purpose of coding care history, the coder will employ the following definition of separation. Separation occurs when the subject is physically separated from one or more primary carers for a period of one month or more. Note that this refers only to primary carers. Simultaneous separation from two primary carers counts as two separations.

If a subject is separated from his carers for the duration of a school holiday, or part thereof, this is not to be considered a separation, even if it is for longer than a month.

If a subject leaves a care home at which he has been resident for one year or more, and he remains away from this care home for one month or more, then this counts as one separation.

Trawling instructions
Quotes should be extracted that contain information about any change in carers that would constitute a new care unit. For each change in carers that meet the definition for a new care unit, a care unit will need to be constructed. The care units should be placed in temporal order. The care unit should record the following, and the trawler should extract sufficient information to complete each of these sections:
• The start date and end date
• The name of each of the people caring for the subject (if the subject enters an institution extract the name of it)
The role of each of the people caring for the subject (e.g. foster parent, boyfriend of the mother, grandparent)

The reason the care unit ended (using the following categories: Divorce of carers; Death of carer(s); Sexual abuse of subject; other subtype of maltreatment of subject; Drug use/ mental illness of previous carers; Carers unable to cope; Carers abandoned the subject; More suitable placement found; Other (specify); Don’t know)

Details of any contact with previous primary carers (extract whether there was contact, the amount of contact, and the nature of the contact)

Details of contact with any perpetrators of any form of maltreatment who were not carers
General Coding Guidelines

This chapter addresses a number of coding issues that apply to all or many of the risk factors. Rather than replicating this information in each of the chapters, it is summarised here, and should be referred to as necessary.

Levels of certainty

When coding the maltreatment subtypes, and particularly Child Sexual Abuse, it is often necessary to base a decision on a degree of certainty rather than absolute certainty. In addition, there may be contradictory information about whether a subtype of maltreatment occurred or not. This section provides guidance on dealing with these difficulties.

A statement made by a clinician or social worker that a subtype of maltreatment occurred is usually sufficient on its own to make a coding.

However, the statement must make it clear either that the abuse did occur or that it probably occurred. A statement that it possibly occurred is not sufficient. This distinction between probably and possibly is usually made by clinicians and social workers, but the following discussion can be applied to other people expressing an opinion about the occurrence of maltreatment.

If someone other than a clinician or social worker, makes such a claim, this is also enough to make a coding, provided that the information given is not contradicted by anyone on a higher level in the authority table. In such cases, the statement of the higher authority is the one to be coded (see authority table below).

There will obviously be degrees of certitude depending on the weight of evidence as summarised by the clinician or social worker, and it is on this basis that we will decide whether or not to score that risk factor. If the professional indicates that the event was 'likely' to have occurred or uses other such words such as 'probably', 'on the balance of probabilities' or 'almost certainly', then we can take the quote as evidence of maltreatment and code accordingly. If the clinician or social worker states without equivocation that it is their 'opinion', they 'think', 'believe' or 'feel' that the maltreatment subtype has occurred, the file should also be coded as involving that subtype.

If words such as 'possible', 'suspicion', 'may' or 'might' are used by the professional without additional information, the quote cannot be accepted as enough to code maltreatment, even when prefixed by words like 'strongly'. For example, the following two quotes would not be accepted:

"It is my opinion that abuse might have occurred"
"I suspect that abuse is a possibility"

However, the following two would:

"I think it is likely that X [the subject] was sexually abused"
"I strongly feel that X [the subject] suffered sexual abuse at the hands of his father"

In situations in which there is contradictory information, the authority table can be consulted:

The authority table

<table>
<thead>
<tr>
<th>Authority level</th>
<th>People</th>
</tr>
</thead>
<tbody>
<tr>
<td>High authority</td>
<td>Psychologists, Psychiatrists, Psychotherapists, Psychiatric social workers, Social worker</td>
</tr>
<tr>
<td></td>
<td>Subject</td>
</tr>
<tr>
<td>Low authority</td>
<td>All others, including results of court cases, lawyers and other members of the judiciary, police officers, and putative perpetrators</td>
</tr>
</tbody>
</table>
The coder should believe the word of a clinician or social worker over that of everyone else, including the subject. In addition, s/he should believe the word of the subject over that of everyone else, other than clinicians and social workers.

**Example 1**
Clinician: ‘I am of the opinion that X [the subject] has been sexually abused by his father’
Subject: ‘I have never been sexually abused’
On the basis of these two quotes, it would be assumed that the subject had experienced sexual abuse (provided the other criteria for coding Child Sexual Abuse were also met)

**Example 2**
Subject: ‘My father sexually abused me when I was a child’
Father of subject: ‘I have never sexually abused my son [the subject]’
On the basis of these two quotes it would be assumed that the subject had experienced sexual abuse (provided the other criteria for coding Child Sexual Abuse were also met).

Note that this discussion refers to direct contradictions, in which one person states that a maltreatment subtype did occur, but another person states that it did not. It does not refer to situations in which one person says it possibly occurred, and one says it probably occurred. For example, if the subject clearly states that he was sexually abused by his father, but a clinician states that the subject was possibly sexually abused, then this subject would be coded as experiencing Child Sexual Abuse.

Occasionally, two or more clinicians or social workers disagree about whether a maltreatment subtype occurred. In this situation, it will be necessary for the coder to make a decision based on available information. It will be necessary to consider whether one of the professionals had more access to important information when arriving at their decision. Also, pay particular attention to when the professionals made that decisions, and whether this was before or after the revelation of important information.

### The role of the Perpetrator Coder

It is necessary for the individual coding the risk and protective factors experienced by a particular subject to be unaware of the perpetration status of that subject. This is to avoid the possibility of bias, in which the coder may be tempted to increase the risk factor scores in cases where the subject is known to have become a perpetrator, or to increase the protective factor scores in cases where he did not. In order to maintain blindness to perpetration status, it is necessary that for each subject one coder first of all establishes the status of the subject and then screens the extracted quotes relating to other risk and protective factors for indicators of that status. This person will be known as the ‘perpetrator coder’.

To maintain objectivity of coding and to ensure equality of task allocation, the perpetrator coder should not be the person who originally trawled the GOSH and/or social services files.

The following tasks will therefore need to be done by the perpetrator coder:

- Establish perpetration status of the subject.
- Establish when perpetration by the subject began and set additional cut-off date for other coder.
- Complete the coding sheet for ‘subject a perpetrator of sexual abuse’.
- Remove all references to perpetration status from quotes which also allude to other risk or protective factors.
- Ensure that no reference to perpetration status appears on the first page of evidence items because this page is automatically seen when the file is opened.
- Tag all quotes ‘To do’ with reference to ‘Prior to perpetration?’.
- Remove all references to perpetration status that appear in the care history table.
- Un-tag all quotes in ‘Odd Psychiatric Symptoms’ that refer to behaviours that are now considered perpetration.
- Complete the coding of the onscreen cover sheet.
In addition, the risk and protective factor coder must be reminded not to double click on the 'Subject a perpetrator of sexual abuse' section, nor to open the 'victim status' table in a full window setting, as perpetration status is inadvertently revealed in this way.

Perpetration status

Perpetration status can be established from one of 4 sources of data:

- Hospital records
- Social Service files
- Metropolitan Police data
- Local constabulary Caution records.

Criteria for GOSH and Social Service data:

Information given in quotes from the GOSH and Social Service files can be used to classify the subject as a perpetrator of sexual abuse. There are different definitions of sexual abuse perpetration which depend upon the age of the subject and that of the victim. These are given in the chapter entitled “Subject as a Perpetrator of Sexual Abuse.” To be classified as a perpetrator of sexual abuse, the subject must fulfil the criteria of at least one of these definitions. The coder must read this section very carefully and code accordingly.

Criteria for Police data:

The subject can be classified as a perpetrator if he has received a Police caution or a Court conviction for a sexual offence. Thus he must have been cautioned or convicted for one of the following offences:

Against children:
- Rape of male/female under 14
- Rape of male/female under 16
- Unlawful intercourse with male/female under 14
- Unlawful intercourse with male/female under 16
- Indecent assault on male/female under 14
- Indecent assault on male/female under 16
- Incest
- Gross indecency with a child

Against adults:
- Rape of male/female
- Indecent assault

or mention of the following words must be made in the police records:

Sexual offences.

Summary:

If the criteria for perpetration status is met according to information gained either from GOSH/Social Services files or from Police data, the subject can be coded as a perpetrator.

Date of first perpetration

This can be established by following the instructions in the section entitled “Onset of Perpetration or Sexualised Behaviour” which is written below.

Additional cut-off date

In order to maintain the longitudinal integrity of the study, risk/protective factor coding must be made using quotes from documents which were dated prior to the subject’s first perpetration offence or prior to his sixteenth birthday, whichever came first. However, if the risk/protective factor coder was required to code up to only one of these ‘cut-off’ dates, (s)he would be immediately aware of the perpetration status of the subject. For
example, if the coding was to be made using a cut-off date other than the subject’s 16th birthday, the coder would know that the reason for this would be that the subject had committed a sexual offence before his sixteenth birthday. If, however, the coding was to be made using the subject’s 16th birthday as the cut-off date the coder would know that, at least until he was 16, the subject had not perpetrated sexual abuse.

With this knowledge, the risk/protective factor coders might be tempted to adjust their risk and protective factor scores in the direction of the hypothesis, i.e. increase risk scores of subjects who went on to perpetrate or increase protective scores for subjects who did not.

Thus an alternative coding strategy has been adopted to circumvent this problem. All subjects are to be coded twice, once using a cut-off date of the subject’s sixteenth birthday, and once using another cut-off date. In cases where the subject has perpetrated prior to his sixteenth birthday, this alternative cut-off will be the date of his first perpetrating behaviour. In cases where the subject has not perpetrated before this date, the alternative cut-off will be a randomly selected date sometime between the subject’s sixth and sixteenth birthday. This is because the youngest possible age at which an individual can be counted as a perpetrator is at six years old.

The risk/protective factor coder will of course be unaware of whether this second cut-off date has been randomly selected or made on the basis of the date of first perpetration. This allocation will be made by the Perpetrator Coder.

If the subject started perpetrating at some point after his sixteenth birthday, all the risk information up to this birthday can be used for coding. However, it will still be necessary to create and code up to a random date so that the risk/protective coder remains blind to the subject’s status. The coding using this random cut-off date will of course not be used in the analysis. Thus it cannot be assumed that the coding to be analysed for all perpetrators will be the one using the random cut-off date.

Random date: This will be established by means of the random number generator. There are 10 years between an individual’s sixth birthday and their sixteenth birthday, and twelve months in any year. The perpetrator coder will therefore use the random number generator to select one number between 1 and 119 to represent the month being selected. The perpetrator coder will then calculate which month this number relates to using the method described below, and assign the first day of this month as the additional cut-off date to avoid the appearance of spurious accuracy. This will be done for each ‘non-perpetrator’.

\[
X = \text{Random Number generated by computer, } \quad 1 < X < 119
\]

\[
\text{Equivalent age of subject} = \quad 6 + \frac{X}{12}
\]

Then by adding this number of years and months to the subject’s date of birth, calculate the random month and year. Finally, assign the date as the first day of that month.

**Removal of references to perpetration status**

To avoid the risk/protective factor coder accidentally finding out the perpetration status of the subject, the perpetrator coder must establish that no quotes which refer to risk or protective factors also refer to the perpetration status. The quickest way of handling this is to double click on the ‘Subject a perpetrator of sexual abuse’ tag and double click on each of the quotes which appear in this list to establish which have been tagged for other risk or protective factors. If one or more of these have been multiply tagged, the perpetrator coder should split up the one quote into two or more quotes, making sure that perpetration status is not mentioned in any quote that refers to risk or protective factors.

In addition, the perpetrator coder should establish that the first quote that appears when the ‘Evidence’ window is opened up does not refer to the subject’s perpetration status. If this is the case, this quote should be copied and pasted to the final page of evidence items, and deleted from the first page.
**Tagging quotes**

The perpetrator coder should, for every quote, 'un-tag' the tagging for 'pre-16' and 'pre-perpetration', changing them to 'To do'. This is to avoid the risk/protective factor coder from accidentally finding out the perpetration status of the subject.

**Removal of quotes from the Care History Table**

The Perpetrator Coder should, for subjects who became perpetrators, remove all references to perpetration status from the care history table. Thus, if a subject started perpetrating at age 13 years and 4 months, his care history table should, as it currently stands, end at this point. However, to mask this fact, the perpetrator coder should delete all references to the subject’s perpetration and indicate in his/her own words that the care unit (which currently ends at 13 yrs 4 months) continued until the subject was 16 yrs.

**Un-tag quotes in ‘Odd Psychiatric Symptoms’**

When quotes relating to perpetration by younger subjects were initially recorded, they were often tagged for both 'Subject as a Perpetrator of Sexual abuse' and 'Odd Psychiatric Symptoms'. In addition there were many quotes that were tagged for ‘Odd Psychiatric Symptoms’, which referred to behaviours that are now considered perpetration. Thus there are now a number of quotes within ‘Odd Psychiatric Symptoms’ that would give away the perpetration status of the subject. It is important that these quotes are untagged to keep the risk/protective coder blind to the perpetration status of the subject.

**Coding of the Onscreen Cover Sheet**

The onscreen cover sheet requests basic information on the subject and is divided into 5 sections.

**Definition of referral**

Referral is defined as the point at which contact was first made with the Great Ormond Street Hospital in connection with the sexual abuse of or by the perpetrator. This will often be the date of the first letter in the GOS file. Contact will normally be made by a professional (e.g. social worker, doctor, police), but if the first contact is made by a parent or other individual then take this as the point of referral.

**Demographic information**

**Basics**

Enter the four digit CSA code for the subject, his name and date of birth.

**Abode at time of referral**

This refers to the residence of the subject at the time of referral. Select the abode from the list given below:

<table>
<thead>
<tr>
<th>Abode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living with family</td>
</tr>
<tr>
<td>Children’s home</td>
</tr>
<tr>
<td>Foster home</td>
</tr>
<tr>
<td>Adoptive home</td>
</tr>
<tr>
<td>School</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Don’t know</td>
</tr>
</tbody>
</table>
County of residence at time of referral
Select from the following categories:

<table>
<thead>
<tr>
<th>County of residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
</tr>
<tr>
<td>Home Counties</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Insufficient information</td>
</tr>
</tbody>
</table>

London refers to: Inner, Outer and Greater London. If the residence is in both Greater London and the Home Counties then select London. (Note: Middlesex is within Greater London).
Home counties: Berkshire, Buckinghamshire, Essex, Hertfordshire, Kent and Surrey.
Other: refers to anything else.

Ethnicity
Select from the following categories:

<table>
<thead>
<tr>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Afro-Caribbean</td>
</tr>
<tr>
<td>Multi-ethnic</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Insufficient information</td>
</tr>
</tbody>
</table>

For this to be coded as anything other than ‘Insufficient information’, there must be a clear statement about the ethnicity of the subject.

Referral to Great Ormond Street Hospital

This section requests information on the referral status of the subject and his family.

Referral status
This section is concerned with whether the individual was referred to Great Ormond Street Hospital. Referral status is divided into the following categories:

<table>
<thead>
<tr>
<th>Referral status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject referred and seen</td>
</tr>
<tr>
<td>Subject referred but not seen</td>
</tr>
<tr>
<td>Family member referred and seen</td>
</tr>
<tr>
<td>Family member referred but not seen</td>
</tr>
<tr>
<td>Not referred</td>
</tr>
<tr>
<td>Insufficient information</td>
</tr>
</tbody>
</table>

Before deciding which category a boy belongs to read the following information.

Referred or not referred
An individual is considered referred if one of the following criteria are met:
1. the file contains a letter written by a professional or parent asking for the individual to be referred
2. mention is made in the file of such a letter
3. a parent or professional mentions that the individual was referred
4. the family was referred and this included the individual
5. the individual was seen by a professional at the hospital for assessment or treatment.

Seen or not seen
If the fifth criteria is met then the individual is considered to have been referred and seen. If the first, second or third criteria is met but the fourth is not, then the individual is to be considered referred but not seen.
The individual is considered to have been seen if the following criteria are met:
• It is clearly stated that the individual met with a professional from the DPM for either assessment or treatment.
• It is clearly deducible from what is written about the case that the individual must have met with a professional from the DPM. For example, there are notes from an interview between a member of staff and the individual.

Without either of the above criteria being met, the following are NOT sufficient to conclude that the individual has been seen:
• An appointment was made or a letter was sent offering an appointment.
• A report was written about the individual by a professional from the DPM.
• There was a professionals meeting at the DPM concerning the case.

Identity of the person or people referred
If the referral was for the subject code either ‘subject referred and seen’ or ‘subject referred and not seen’.
If the referral was for the subject’s family, which includes the subject, then this would also be coded as either ‘subject referred and seen’ or ‘subject referred and not seen’.
Do not code ‘Family member referred and seen’ or ‘Family member referred and not seen’ when the family, including the subject, is referred

If the subject was not referred, but another family member was then code either ‘Family member referred and seen’ or ‘Family member referred and not seen’.
The criteria for distinguishing between the ‘family referred and seen’ and family referred and not seen’ are given above in ‘Referred or not referred’ and ‘Seen and not seen’.

Not referred / Insufficient information
If neither the subject nor a family member was referred then code ‘Not referred’. If it is unclear whether the subject or a family member were referred then code ‘Insufficient information’.
These subjects should not be in the sample.

Date of referral
Two dates are recorded for this section: the date of the referral letter (see definition of referral given above) and the date on which the individual was first seen at the hospital.

Date of the referral letter
Record the date of the referral letter.

Date first seen
Record the date on which the individual was first seen by a professional at the hospital for assessment or treatment.

Referral source
The referral source is the individual or institution responsible for the initial referral (see definition of referral given above).
The table below describes the categories for referral source. Select the category which best describes the referral source.

<table>
<thead>
<tr>
<th>Referral source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social services</td>
</tr>
<tr>
<td>Guardian ad litem</td>
</tr>
<tr>
<td>General Practitioner</td>
</tr>
<tr>
<td>Paediatrician</td>
</tr>
<tr>
<td>Psychiatrist or other mental health practitioner (incl. Psychiatric Social Worker)</td>
</tr>
<tr>
<td>Parent</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Don’t Know</td>
</tr>
</tbody>
</table>
Reason for referral

The table below gives the reason for referral categories. Only one category is to be selected. If the individual was referred for more than one reason then select the reason with the highest hierarchy number. If the individual was referred to the hospital on more than one occasion then record the reason for the first referral in connection with sexual abuse, otherwise record the reason for the first referral.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Hierarchy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject a perpetrator of sexual abuse</td>
<td>4</td>
</tr>
<tr>
<td>Subject a victim of sexual abuse</td>
<td>3</td>
</tr>
<tr>
<td>Mental health reasons</td>
<td>2</td>
</tr>
<tr>
<td>Physical health reasons</td>
<td>1</td>
</tr>
<tr>
<td>Family member was referred, not subject</td>
<td>0</td>
</tr>
</tbody>
</table>

File information

Size of file

Measure the thickness of the file in millimetres. Enter this number in the appropriate box.

Date file began

Find the document with the earliest date. Enter this date.

Date file ended

Find the document with the most contemporary date. Enter this date. It is particularly important that this section is completed.

Time span of the file

This is computed automatically on the basis of the answer to the previous two questions.

Victim information

This section is only to be completed if the subject was a victim of sexual abuse at the time of referral. It is not to be completed in reference to victimisation that occurred subsequent to referral. If the subject was not a victim of sexual abuse at the time of referral then select the ‘Not applicable’ option for the following question.

Legal status following child protection case conference

This section refers to the legal status of the subject following the case conference and at the time of referral. Select from the following categories:

<table>
<thead>
<tr>
<th>Legal status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No legal status</td>
</tr>
<tr>
<td>Care Order</td>
</tr>
<tr>
<td>Accommodation Order</td>
</tr>
<tr>
<td>Interim Care Order</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Not applicable</td>
</tr>
<tr>
<td>Insufficient information</td>
</tr>
</tbody>
</table>

Child Protection Registration

If there is a note in the file that the child’s name has been added to the child protection register prior to referral to the hospital, then the trawler should tick and date the appropriate fields in the demographic section of the trawling database.
Onset of Perpetration Behaviour

It is important that date of first perpetration is clearly established. This is so that the coder can decide whether a recorded quote can be used to assess risk exposure. The following guidelines should be consulted when the references to the onset of perpetration are not precise.

Onset information tends to be recorded in a limited number of ways and often a precise date is given for the first offence. However, when the quote mentions the subject’s age or that first perpetration occurred a number of years ago or the language is even more vague than that, the following guidelines must be applied:

Subject’s Age

When the subject’s age is used to describe the onset of perpetration, the birthday that the subject achieved that age is taken as the date of first perpetration. For example,

‘The subject was seven when he first began to perpetrate sexual abuse’
The birthday on which the subject turned seven would be taken as the onset of perpetration. Or,

‘The subject was between eight and nine years old when he first began to perpetrate sexual abuse’
In this case, the subject’s eighth birthday would be taken as the onset of perpetration. This represents the most conservative stance to take.

Should a quote mention that the subject began perpetrating before his sixth birthday i.e. before we would count any behaviour as perpetration, then his sixth birthday would be taken as the start of perpetration, provided that he continued to perpetrate after his 6th birthday.

Number of years ago

When a quote from a dated document states that the subject began perpetrating X number of years ago, the coder should subtract X years from the document date and use the mid-point of that year (i.e. 1st July) as the onset of perpetration.

‘The subject began perpetrating six years ago (document date 28/5/88)’
In this case the coder would determine that first perpetration was on 1/7/82.

Should the quote give a range of years, the earliest first date of perpetration should always be used.

Should the information give a date before the subject’s sixth birthday, then the date of the date of the subject’s sixth birthday should be used as the onset for perpetration, provided he continued to perpetrate beyond his sixth birthday.

Should the document be undated and this is the only quote from which the onset of perpetration can be estimated, the case should be discussed with another member of the research team.

Vague terminology

If the onset of perpetration is described with any of the terms listed below, the definitions given should be used:

“A couple” subtract 2 years from the document date and use the mid-point of that year
“A few” / “Several” subtract 3 years from the document date and use the mid-point of that year

If the terminology used is even more vague, for example ‘the subject began perpetrating a while ago’ then the coder should use a more precise quote if one exists or consult with the trawler of that file.
The closeness ratings are given to assist in the correct coding of a particular act, e.g. witnessing intrafamilial violence.

It is possible that the relationship between the subject and the perpetrator may change over the course of the subject’s childhood and adolescence. In such situations, the rating should be based on the highest score obtained for the relationship between the subject and perpetrator, as long as this occurred before the age of 16 or before the point of first perpetration, whichever is the sooner. This can be made regardless of whether this highest score was obtained before, during or after the maltreatment.

The Closeness Levels

1. Non family – authority figure, stranger, acquaintance, peer, person living with the subject in an institutional setting, lodger
   - This level refers to individuals who are not family members of the subject.
   - A stranger is an individual who was not known to the subject until the day of the abuse, and who cannot be better described by a higher level.
   - An acquaintance is an individual who is known to the child but whose relationship cannot be better described by the definitions for a higher scoring level. A friend of the family would score at this level. A boyfriend of the mother or girlfriend of the father would also score at this level if they were non resident or, if living with the subject, it is clear that they had no care responsibilities for the subject.
   - Any individual who is in a position of recognised authority over the child would be at this level. The term includes individuals such as teacher, residential carer, scout leader, vicar etc.
   - Individuals living with the subject in an institutional setting are also considered to be acquaintances and therefore also score at this level.
   - A peer is an acquaintance or friend similar in age to the subject.
   - Lodgers and boarders who may be resident with the subject, but who clearly do not have a caring role, score at this level.

2. Family members who do not have a caring role - same generation siblings and cousins, uncles and aunts and grandparents
   - This level includes family members who are from the same generation as the subject. Note that ‘the same generation’ is defined in terms of relationship between the subject and the perpetrator rather than proximity in age.
   - Full siblings, step siblings, foster siblings, and adopted siblings and cousins are to be coded at this level whether or not they are resident with the subject for any length of time.
   - Uncles and aunts, who are not carers score at this level. This includes uncles and aunts who have never been resident with the subject, or have been resident but have clearly not had a caring role. If the criteria for carer are met, then they would score at level 3.
   - Grandparents, who are not carers score at this level. This includes, grandparents who have never been resident with the subject, or have been resident but have clearly not had a caring role. If they do meet criteria for carer then they would score at level 3.
   - This level also includes parents of the subject who have never been main carers or primary carers for the subject.

3. All main carers and biological parents
   - Any individual, regardless of their previous or subsequent social role or familial relationship would score at this level as long as they have been a main carer or primary carer for the subject. Therefore, uncles, aunts, grandparents or even individuals who were at one time strangers could score at this level.
   - See the definition of main caregiver and primary caregiver before making this coding.
Child Sexual Abuse

Definitions

Child sexual abuse

The following three criteria must be met: 1) the subject was under the age of 16 years at the time of the abuse; 2) the abuse involved sexual contact between the subject and the perpetrator (see definition of sexual contact given below); and 3) EITHER the perpetrator was two years or more older than the subject OR the perpetrator employed physical coercion (see definition of physical coercion below) OR the subject was threatened with an offensive weapon.

Sexual Contact

The criterion for sexual contact is met if the act involves physical contact between a victim and a perpetrator and that that contact involves attempts, successful or otherwise, to perform sexual acts with the victim. The acts which meet this criterion are described extensively below in the ‘Examples of Child Sexual Abuse’ section. Note that contact is assumed to have taken place if the phrases ‘sexual abuse’, ‘molested’ or ‘indecent assault’ are used. In addition, the criterion for sexual contact is met if an individual uses physical coercion to permit another individual to perform sexual acts on the subject, either successfully or unsuccessfully. (E.g. the mother pins the subject down whilst the father tries to bugger him.)

Physical coercion

The concept of ‘physical coercion’ is mainly necessary to classify behaviour involving sexual contact as sexually abusive in circumstances where there is not at least a two year age gap between the perpetrator and the victim. Physical coercion is defined as physical behaviour designed to ensure compliance in a sexual act against the subject’s wishes. This must include contact either between the perpetrator and the subject or an object and the subject, provided that the perpetrator has deliberately and maliciously caused this contact, but it will not necessarily involve marks being left on the subject. For example, it would be enough for the quote to state that the perpetrator had grabbed the subject and pushed him into the room where the sexual assault took place, for physical coercion to be assumed.

If the word ‘forced’ is used, e.g. the subject was forced to have sex with his twin brother, assume that the force involved physical coercion and therefore code as sexual abuse. Actions that explicitly meet the criteria for physical abuse would, of course, also meet the criteria for physical coercion if they are designed to ensure compliance against the victim’s wishes.

It is important, in defining physical coercion this way that minor actions, such as a subject being groped against his will by a same-aged schoolmate in the playground, are not coded as sexual abuse. This is because the aim of the project is not to identify protective factors against this type of behaviour, but against the development of paedophilia. Thus, in situations where there is neither a two year age gap between the subject and the perpetrator nor the threat of an offensive weapon, there must be clear evidence that physical coercion was employed, as defined above.

Genital area

For the purpose of this section, the genital area is defined as the penis, testicles and anus for males and the vagina and anus for females. Note the breasts are not considered part of the genital area.

Penetration

Penetration consists of attempted, partial or total penetration of the vagina, anus or mouth by a penis, or the attempted, partial or total penetration of the vagina or anus by a finger or objects such as the handle of a
hairbrush or a stick. Note that this definition includes both penetration of the subject as well as penetration by the subject.

**Perpetrator criteria**

Any person, no matter what relationship they have with the subject, can be a perpetrator of sexual abuse.

**Entering information in the correct factor**

Frequently during the trawling process, the trawler is likely to come across quotes which appear to fit within two or more categories. The following guidelines are intended to enable reliable allocation of the quotes.

In the event that an individual (e.g. psychiatrist, psychotherapist, judge) contradicts the current classification system in any comments that (s)he makes (e.g. refers to a sexually abused child as emotionally abused because of his sexual victimisation), record the relevant quote and allocate it according to the system in this manual. Make a note in the notes section giving the reasoning for the allocation adopted.

**Child sexual abuse and physical abuse**

Physical injuries that occur as a direct result of sexual interaction (e.g. rectal tears) are coded solely under sexual abuse. Physical coercion before, during or after the sexual interaction can be scored in the experiencing physical abuse section, if the criteria for physical abuse are met. If physical abuse occurs in the context of sexual penetration, this is to be coded as both sexual abuse and physical abuse.

**Dealing with potential problems**

**Reference to a group of individuals being maltreated**

If the file refers to a group of individuals experiencing maltreatment, and this group includes the subject, then it is permissible to infer that the subject has experienced this form of maltreatment. This will usually be in the form of reference to the children of a perpetrating parent. (E.g. 'The father [of the subject] used to beat his children'; 'The father [of the subject] has had anal intercourse with his two sons'.)

**Two years difference in age**

Record any information that indicates that there is a two year difference between the subject and the perpetrator(s). Alternatively, record any clear statement of the age of the perpetrator(s) or of statements from which this age can be logically deduced. An example of such a statement might be that the perpetrator is clearly identifiable as an adult (father, man, teacher) whilst the subject is a child (boy, son, pupil). Assume that a two year age gap exists even when the perpetrator is the victim’s uncle. If the perpetrator is described as an ‘older boy’ the coder should interpret this as involving a two year difference, whilst if no mention is made of any age difference, no such assumption can be made. If the coder is in any doubt about the age differential, assume that there is not a two year gap.
Dichotomous question: Did the subject experience child sexual abuse?

Code as present if the following criteria are met:
• At least one of the experiences occurred before the subject’s 16th birthday or the date of the subject’s first perpetration, whichever took place first.
And for that or those experience/s, the following are also met:
• Ensure that the guidelines on vague allegations and contradictory information given in the introduction have been adhered to.
• Sexual Contact was involved, see definition of sexual contact.
• AND EITHER physical coercion was involved OR the subject was threatened with an offensive weapon, OR the perpetrator of the abuse was two or more years older than the subject.
• Check to ensure that the perpetrator criteria are met.
• ‘Entering information in the correct factor’ needs to be examined to ensure that the experience does not belong to another factor.
• Experiences constituting child sexual abuse are any of those described in the ‘Examples of Child Sexual Abuse’ section; essentially, the act should be the same or similar to one of the acts described in this section.

If the criteria are not met, code ‘No’.
Examples of Child Sexual Abuse

The following are examples of the types of behaviour that constitute child sexual abuse. If any of the following, or similar events, are found within the subject’s files and the additional criteria (stated above in ‘Dichotomous Question’ section) are also fulfilled, he may be coded as having been the victim of child sexual abuse.

1. Non-genital contact

- Physical contact between the perpetrator and the subject which contains a sexual element but involves neither the touching of the subject’s genital area by the perpetrator nor the touching of the perpetrator’s genital area by the subject. See the definition of genital given above. Note that unsuccessful attempts to perform such acts also meet the criteria as long as some form of physical contact was involved.
- The file states that the subject was sexually abused, but no other information is contained in the file. In such situations, contact can be assumed to have taken place.
- The file states that the subject was on the Child Protection Register for ‘Sexual Abuse’ or ‘Actual Sexual Abuse’. If the file states that the subject was on the Child Protection Register for ‘Potential Sexual Abuse’ or any variation on that phrase (e.g. ‘Grave Concern’ or ‘Likely’) then, in the absence of further information, this is not to be coded as sexual abuse.
- In some instances, a word or phrase will be used to describe a sexual behaviour, which does not make it clear what the act involved. Examples include ‘molested’ and ‘indecent assault’. In such situations, contact can be assumed to have taken place.
- Slang phrases are used to describe sexual behaviour, but it is unclear what the act involved. Examples include: sexed/sexing, had it off with, doing it/did it, shagged, rogered etc. In such situations, contact can be assumed to have taken place.

Examples
- The subject is made to suck the perpetrator’s breasts.
- The subject is made to fondle the perpetrator’s breasts.
- The perpetrator grabs at the subject and tries to fondle his bottom.
- The perpetrator holds the subject and tries to ‘French kiss’ the subject.
- The file states that the subject was sexually abused, no other information is given.
- A father has a conviction for indecently assaulting the subject, no other information is given.
- The subject reports that the father ‘sexed’ him, no other information is given.

2. Non penetrative genital contact

- The perpetrator touches the subject’s genital area (clothed or unclothed) and/or the subject touches the perpetrator’s genital area (clothed or unclothed), no penetration is involved. Note that unsuccessful attempts to perform such acts also meet the criteria as long as some form of physical contact was involved.
- This level includes: masturbation of the subject by the perpetrator, masturbation of the perpetrator by the subject, and simulated intercourse which did not involve penetration.

Examples
- The perpetrator forces the subject to caress his penis and testicles.
- The perpetrator engages in mutual masturbation with the subject.
- The subject is forced to caress the perpetrator’s anus, but no penetration is involved.
- The subject is forced to rub his penis over the perpetrator’s vagina, but no penetration takes place.
- The perpetrator rubs his penis up against the subject’s penis.

3. Penetration

- See the definition of penetration given above.
- The act might consist of one or more types of penetration
- If the word ‘fucked’ or ‘raped’ is used, this can be taken to indicate penetration
Examples

- The subject has venereal disease. No information regarding the sexual contact is known.
- A mother has oral sex with her son.
- It is reported that the subject had oral and anal sex with the perpetrator.
- The subject reports that he performed oral sex on the perpetrator, he later reveals that he was also buggered by the same perpetrator.

4. Penetration plus physical abuse, prostitution or defecation and urination

- The perpetrator has used physical abuse, as defined above, whilst performing intercourse or other forms of sexual penetration. The physical act must meet or exceed the minimum criteria for 'experiencing physical abuse', e.g., use of restraint. Note that physical injuries which are a direct result of the sexual penetration do not count as physical abuse.
- Note that if the word 'raped' is used it cannot be assumed that physical abuse was also performed, unless there is additional information indicating that it was.
- The perpetrator prostitutes the subject. This would involve the perpetrator benefiting financially from allowing the subject to be abused by a third party.
- The sexual act may also involve defecating or urinating on the subject, or the subject having to defecate or urinate on the perpetrator. Note that to be scored in the sexual abuse section, defecation or urination must be part of a sexual act or must involve a sexual element. For example, urinating on the subject as part of other acts with a sexualised element such as kissing the subject, or touching the subject's genitalia would count as sexual abuse; however, urinating on the subject solely for the purpose of demeaning the subject would not score in this section.

Examples

- The perpetrator ties the subject to the bed and has forced sexual intercourse with the subject.
- The perpetrator sodomises the subject having beaten him, inflicting bruising, until he agreed to the act.
- During a series of acts which involve touching the subject's genitals and a number of other sexual acts, the perpetrator defecates on the subject's chest.

Gender of perpetrators of child sexual abuse

Before including a person as a perpetrator, note that they should only be included if it is possible to code the 'Dichotomous question' for this maltreatment factor as present for the subject, solely on the basis of that one person.

If all of the perpetrators of the child sexual abuse against the subject are male code '1'.

If all of the perpetrators of the child sexual abuse against the subject are female code '2'.

If perpetrators of the child sexual abuse includes both males and females code '3'.
### Subject as a Perpetrator of Sexual Abuse

#### Introduction

The definition of perpetration is split into two age dependent categories:

- Perpetration by subjects who are aged six or over but under twelve. These will be referred to as 'Younger perpetrators'.
- Perpetration by subjects who were twelve or older. These will be referred to as 'Older perpetrators'.

This allows us to use a more restrictive definition for younger perpetrators than that for those who are older. The justification for this change is that the previous system using age as the only criterion to differentiate childhood sexual behaviours from sexually abusive behaviours was too simplistic. Pithers (1998) describes a number of alternative clinical systems used to make this distinction and our system has been adapted from this.

Definitions that are specific to only 'Younger' or 'Older' perpetrators are written immediately below in the sections dealing with these two groups.

The important **Operational Definitions** used for aspects of the abuse, for example the definition of penetration, are common to both young and older perpetrators and consequently these are described in a section at the end of this chapter.

#### Perpetration by ‘Younger’ subjects aged six or over but under the age of 12.

**Definition of Perpetration by ‘Younger’ subjects**

The following three categories represent behaviours that are to be classified as perpetration of sexual abuse by ‘younger’ subjects. Below these categories are two additional criteria to be considered when assessing perpetration status.

1. **Genital Contact**

   *Direct contact with the genitals of the victim* when the victim is *not clothed* or their clothing has been partially removed would be considered to be perpetration. Alternatively, the victim may be required to touch the genitals of the unclothed subject under duress. Under both circumstances, the following conditions must apply:

   **EITHER**
   - Without an indication of physical coercion, these can only be considered as perpetration if there is an indication that the act was repeated more than twice (this could either be with different victims or the same victim on different occasions) and there is a 2 year age gap between perpetrator and victim.
   - OR
   - If physical coercion of any kind is used,
   - OR
   - If the use of an offensive weapon is threatened,

   then regardless of pervasiveness or the age gap between perpetrator and victim, these would count as perpetration.

   Contact with genitals can be assumed if the word ‘masturbated’, or a phrase with similar meaning, is used in relation to a physical act involving the subject and his victim, i.e. one person must have been masturbating the other.
More than twice’ would be suggested by phrases such as ‘several times’, ‘many times’ or even ‘a few times’.

2. Penetrative acts

- A penetrative act only has to occur once to be considered as perpetration.
- A two year age gap must be apparent between perpetrator and victim, unless physical coercion of any kind has been used.

For definitions of penetration, physical coercion, and two year age gap see the ‘Operational Definitions’ section at the end of this chapter.

3. General Statements of acts

If a clinician or social worker, (including any of the following: Psychologists, Psychiatrists, Psychotherapists, Psychiatric social workers, Social worker) state that a subject under the age of twelve ‘has sexually abused another child’ this would be counted as perpetration.

Additional criteria:

- Attempted Acts - Over the age of 12, attempted acts are treated like successful acts, these should only be treated as perpetration under 12 if the victim was unclothed or partially unclothed and there was direct contact with the victim’s genitals.
- Acts over clothing - Fondling over clothes or simulated sex over clothes or any other behaviour if over clothing, are behaviours that, under no circumstances, are to be considered abusive.

Coding of onset of perpetration

As a result of the young age of the subjects who would qualify as ‘younger’ perpetrators, it is likely that the only source of data concerning the onset of their perpetrating behaviour would be from their hospital or social services files. It is possible that this information is not available in a clear statement from within the files. If this date cannot easily be calculated on the basis of the information given, it is important that the coder does not attempt to make a ‘best guess’ from this information. Refer instead, for the onset date, to the section entitled “Onset of Perpetration or Sexualised Behaviour” within the “General Coding Guidelines” section.

If it is not possible to make such an estimate from the information given, the coder should indicate that there is insufficient information to answer this question.

Perpetration by ‘Older’ subjects 12 years of age or more.

Perpetration by subjects who are 12 years old or older has been divided into perpetration against children and perpetration against adults. If the criteria in at least one of these definitions are met by the subject and he has performed one of the behaviours listed in the ‘Examples of Sexually Abusive Behaviour’ below, he can be classified as a perpetrator of sexual abuse.

Definition of perpetration against children:

The following three criteria must be met:

1) The victim was under the age of 16 years at the time of the abuse;
2) The abuse involved sexual contact between the subject and the victim (see definition of sexual contact given below);
3) EITHER
   the subject was two years or more older than the victim
   OR
the subject employed physical coercion (see definition of physical coercion)
OR
the subject threatened the victim with an offensive weapon.

Definition of perpetration against adults:
The following three criteria must be met:

1) the victim was aged 16 or over at the time of the abuse;
2) the abuse involved sexual contact between the subject and the victim (see definition of sexual contact given below);
3) the subject employed physical coercion (see definition of physical coercion below)
   OR
the subject threatened the victim with an offensive weapon.

Sexual Contact
The criterion for sexual contact is met if the act involves physical contact between a victim and a perpetrator and that that contact involves attempts, successful or otherwise, to perform sexual acts with the victim. The acts which meet this criterion are described extensively in the 'Examples of Sexually Abusive Behaviour' section. Note that contact is assumed to have taken place if the phrases ‘sexual abuse’, ‘molested’ or ‘indecent assault’ are used. In addition, the criterion for sexual contact is met if an individual uses physical coercion to permit another individual to perform sexual acts on the victim, either successfully or unsuccessfully. (E.g. the subject pins the victim down whilst the father tries to bugger him.)
The following are behaviours which would be classified as perpetration. They are listed in four groups according to their type. If the subject meets the criteria for one of the perpetration definitions given above and has performed one of the following behaviours, he can be classified as a perpetrator of sexual abuse.

1. Non-genital contact

- Physical contact between the subject and the victim which contains a sexual element but involves neither the touching of the victim’s genital area by the subject nor the touching of the subject’s genital area by the victim. See the definition of genital given above. Note that unsuccessful attempts to perform such acts also meet the criteria as long as some form of physical contact was involved.
- The file states that the subject sexually abused the victim, but no other information is contained in the file. In such situations, contact can be assumed to have taken place.
- In some instances, a word or phrase will be used to describe a sexual behaviour by the subject towards the victim, which does not make it clear what the act involved. Examples include ‘molested’ and ‘indecent assault’. In such situations, contact can be assumed to have taken place.
- Slang phrases are used to describe sexual behaviour by the subject with the victim, but it is unclear what the act involved. Examples include: sexed/sexing, had it off with, doing it/did it, shagged, rogered etc. In such situations, contact can be assumed to have taken place.

Examples
- The victim is made to fondle the subject’s buttocks.
- The subject grabs at the victim and tries to fondle his/her bottom.
- The subject holds the victim and tries to ‘French kiss’ the victim.
- The file states that the subject sexually abused an individual, no other information is given.
- The victim reports that the subject ‘sexed’ him, no other information is given.

2. Non-penetrative genital contact

- The subject touches the victim’s genital area (clothed or unclothed) and/or the victim touches the subject’s genital area (clothed or unclothed), no penetration is involved. Note that unsuccessful attempts to perform such acts also meet the criteria as long as some form of physical contact was involved.
- This level includes: masturbation of the victim by the subject, masturbation of the subject by the victim, and simulated intercourse which did not involve penetration.

Examples
- The subject forces the victim to caress his penis and testicles.
- The subject engages in mutual masturbation with the victim.
- The victim is forced to caress the subject’s anus, but no penetration is involved.
- The victim is forced to rub his penis around the subject’s anus, but no penetration takes place.
- The subject rubs his penis up against the victim’s penis.

3. Penetration

- See the definition of penetration given above.
- The act might consist of one or more types of penetration
- If the word ‘fucked’ or ‘raped’ is used, this can be taken to indicate penetration

Examples
- It’s reported that the subject had oral and anal sex with the victim.
- The victim reports that he performed oral sex on the subject. He later reveals that he also buggered him.
4. Penetration plus physical abuse, prostitution or defecation and urination

- The subject has used physical abuse, as defined above, whilst performing intercourse or other forms of sexual penetration on a victim. The physical act must meet or exceed the minimum criteria for 'experiencing physical abuse', e.g. use of restraint.
- Note that if the word 'raped' is used it cannot be assumed that physical abuse was also performed, unless there is additional information indicating that it was.
- The subject prostitutes the victim. This would involve the subject benefiting financially from allowing the victim to be abused by a third party.
- The sexual act may also involve defecating or urinating on the victim, or the victim having to defecate or urinate on the subject. Note that to be scored in the sexual abuse section, defecation or urination must be part of a sexual act or must involve a sexual element. For example, urinating on the victim as part of other acts with a sexualised element such as kissing the victim, or touching the victim's genitalia would count as sexual abuse; however, urinating on the victim solely for the purpose of demeaning him/her would not score in this section.

Examples
- The subject ties the victim to the bed and has forced sexual intercourse with him/her.
- The subject sodomises the victim having beaten him/her, inflicting bruising, until (s)he agreed to the act.

Coding of onset of perpetration

Information relating to the onset of their perpetrating behaviour may be available either from their hospital or social services files or from criminal record data. This could be found from quotes in which these dates are clearly stated or from dates of cautions or convictions stated in the police files. It is possible that this information is not available in either of the ways stated above. If these dates cannot easily be calculated on the basis of the information given, it is important that the coder does not attempt to make a 'best guess' from this information. Refer instead, for the onset date, to the section entitled "Onset of Perpetration or Sexualised Behaviour" within the "General Coding Guidelines" section.

If it is not possible to make such an estimate from the information given, the coder should indicate that there is insufficient information to answer this question.

Operational Definitions Common to both Younger and Older Perpetrators

The following are definitions of concepts that are relevant in the classification of both Younger and Older perpetrators. Read them carefully before making any coding of perpetration status.

Definition of penetration:

Penetrative acts are defined as partial or total penetration of the vagina, anus or mouth by a penis or the partial or total penetration of the vagina or anus by a finger or objects such as the handle of a hairbrush or a stick. The child will probably use an alternative word for penis, vagina and anus such as 'willy', 'fanny' or 'bum'. It can be assumed that the words 'fucked' and 'raped' imply penetration, whilst for other colloquial words no such assumption should be made.

Note that this definition includes both penetration of the subject as well as penetration by the subject. However there is an important qualification to this last point - if the subject is being penetrated by the victim or having his penis sucked by the victim, this can only be considered as perpetration by the subject if the victim has been forced to commit the act (or if the victim is two years younger than the subject). If the subject is not the one using force, he may in fact be the victim.
Definition of genital area:

For the purpose of this section, the genital area is defined as the penis, testicles and anus for males and the vagina and anus for females. Note that the breasts are not considered part of the genital area.

Physical coercion

The concept of ‘physical coercion’ is mainly necessary to classify behaviour involving sexual contact as sexually abusive in circumstances where there is not at least a two year age gap between the subject and the victim. Physical coercion is defined as physical behaviour designed to ensure compliance in a sexual act against the victim’s wishes. This must include contact either between the subject and the victim or an object and the victim, provided that the subject has deliberately and maliciously caused this contact, but it will not necessarily involve marks being left on the victim. For example, it would be enough for the quote to state that the subject had grabbed the victim and pushed him/her into the room where the sexual assault took place, for physical coercion to be assumed.

If the word ‘forced’ is used, e.g. the victim was forced to have sex with his twin brother, assume that the force involved physical coercion and therefore code as sexual abuse. Actions that explicitly meet the criteria for physical abuse would, of course, also meet the criteria for physical coercion if they are designed to ensure compliance against the victim’s wishes.

It is important, in defining physical coercion this way that minor actions, such as a subject groping a same-aged schoolmate in the playground against their will, are not coded as sexual abuse. This is because the aim of the project is not to predict protective factors against this type of behaviour, but against the development of paedophilia. Thus, in situations where there is neither a two year age gap between the subject and the victim nor the threat of an offensive weapon, there must be clear evidence that physical coercion was employed, as defined above.

Perpetrator criteria for subject as a perpetrator of sexual abuse:

A subject can be a perpetrator of sexual abuse, no matter what relationship they have with the victim.

Two years difference in age

This can be established from any quote that indicates there is a two year difference between the subject and the victim(s). Alternatively, any clear statement of the age of the victim(s) or statements from which this age can be logically deduced could be used to establish the two year age difference. An example of such a statement might be that the victim is clearly identifiable as being of pre-school age (under 5) whilst the subject is an adolescent (over 12). A two year age difference can also be assumed if the subject is described as the victim’s uncle, or the victim is described as the subject’s niece or nephew.

If the subject is described as an ‘older boy’ with reference to the victim, the coder should interpret this as involving a two year difference, whilst if no mention is made of any age difference, no such assumption can be made.

If the coder is in any doubt about the age differential, assume that there is not a two year gap.
Experiencing Physical Abuse

**Definitions**

**Physical abuse**

Physical abuse is defined as physical behaviour which does, or has the potential to do, physical harm to the subject. This must include contact either between the perpetrator and the subject or an object and the subject, provided that the perpetrator has caused this contact. Detailed descriptions of behaviours that constitute physical abuse are given in the ‘Examples of Physical Abuse’ section below.

**Restraint**

Restraint is defined as a positive action by the perpetrator, involving physical contact between the subject and a device such as a rope or flex which has been specifically employed by the perpetrator to prevent the subject’s free movement.

**Perpetrator Criteria**

For an individual to be considered a perpetrator of physical abuse against a subject, their behaviour must meet the criteria for physical abuse given above, and they must either be identified as the cause of the subject’s physical injury or else the proponent of an aggressive act likely to cause such an injury. For more information about the types of behaviour that constitute physical abuse, refer to the ‘Examples of Physical Abuse’ section below. Any individual, no matter what relationship to the subject, can be a perpetrator of physical abuse. If it is unclear whether an individual meets the criteria for perpetrator, then the individual is not to be considered a perpetrator.

**Entering information in the correct factor**

**Experiencing physical abuse and child sexual abuse**

Physical injuries that occur as a direct result of sexual interaction (e.g. rectal tears) are coded solely under sexual abuse. Physical coercion before, during or after the sexual interaction can be scored in the experiencing violence factor, (i.e. in both factors) if the criteria for physical abuse are met. If it is unclear whether physical abuse was involved then the criterion is not met.

**Experiencing physical abuse and witnessing intrafamilial violence**

If a family member simultaneously physically abuses both the subject and another family member then this event is to be coded in both experiencing physical abuse and witnessing intrafamilial violence. If the subject accidentally becomes caught up in violence involving two family members, and is himself physically abused in some way, then this too is to be recorded in both factors.
Experiencing physical abuse and rejection by carers

If the subject is restrained (see definition above) then this is to be scored under experiencing physical abuse. If the subject is contained but there is no restraint then this is to be scored under rejection by carers. Containment is defined as restricting the free movement of the subject (e.g. locking the subject in a box, cupboard or room). If it is unclear whether restraint was involved, then assume it was not and code under rejection by carers.

Dealing with potential problems

Marks to the body

For some of the acts that count as physical abuse, there is not a requirement of marks to the body. These are:
- Restraint of an individual
- In the case of behaviours that involve an individual being hit with an instrument, or if there is a mention of him/her being ‘kicked’, ‘beaten’, ‘beaten up’, ‘thumped’ or ‘punched’
- A report that physical abuse took place, or the individual is on the Child Protection Register under the category of ‘Physical Abuse’ or ‘Actual Physical Abuse’, but there is no more information about the physically abusive acts.
- An individual is smothered or choked.
- An individual is hospitalised because of a physically abusive act.

Cause of marks to the body

Note that it must be clearly stated or reasonably inferred that a mark was a result of the physical abuse by a perpetrator, rather than a result of some non-abusive source.

Clearly stated
E.g. ‘The child had a black eye which he got from being punched by the father’
Here it clearly states that the mark was a result of the physically abusive act. This factor could be scored as present on the basis of this quote.

Reasonably inferred
E.g. ‘The father was violent towards the child, and the child would often turn up at casualty with injuries.’
The proximity of the two clauses (father’s violence, hospitalisation) means that we can interpret the injuries as resulting from the father’s violence. This factor could be scored as present on the basis of this quote.

Neither clearly stated or reasonably inferred
E.g. ‘The child had a number of bruises on his back.’
Here there is no indication that the bruises were caused by physical abuse. Therefore, this factor cannot be scored on the basis of this act alone.

Also note that a paediatrician (or anyone else’s) suspicion that a mark occurred by non accidental means is not sufficient; there must be a degree of certainty rather than a suspicion.

Physical abuse vs. Punishment

It is important in this section to distinguish quotes concerning physical abuse, which we are interested in, from non-abusive physical punishment, which we are not. Punishment is regarded as non-abusive if it involves appropriate setting of boundaries and does not result in marks being left on the subject. However, if an action referred to as punishment is deemed to be inappropriate by a social worker or a clinician, it is to be coded as physical abuse. A coding of ‘experiencing physical abuse’ will also be made if behaviours mentioned within the ‘Examples of Physical Abuse’ section below are recorded.

The following words could potentially be interpreted either as punishment or physical abuse, however the mention of marks or bruises of some kind should result in a coding of experiencing physical abuse: hit, slapped,
spanked, smacked or cracked. In the absence of information indicating a physical mark, these cannot be coded under ‘experiencing physical abuse’.

In the case of behaviours that involve the subject being hit with an instrument, or if there is a mention of him being ‘kicked’, ‘beaten’, ‘beaten up’ or ‘punched’, the mention of marks is not necessary for a coding of physical abuse to be made. For example, it is enough to know ‘the subject was beaten up’ for a coding of experiencing physical abuse to be made.

**Vague aggression**

There are a number of words or phrases which may appear to indicate physical abuse, but are vague in that they can be often used to refer to both verbal and physical abusive behaviour.

These words include the following: aggressive/ly, forceful/ly, hostile/hostility, stormy (relationship), turbulent (relationship).

These should be taken as possible indicators of physical abuse, and the quote containing the phrase should be extracted, but they are not sufficient in themselves for a coding of physical abuse to be made. A coding can only be made if it is clear, or it can be reasonably inferred that the act involved physical contact. This will mean that either there are other quotes which state there was physical contact, or the quote itself indicates that there was contact.

**Examples**

- Quote 1: ‘The father had an aggressive relationship with the subject.’
- Quote 2: ‘The father had a hostile relationship with the subject, who would often turn up at casualty with injuries.’
- Quote 3: ‘The father would punch and kick the subject.’

Quote 1 on its own would not be sufficient to make a coding of physical abuse as the only evidence is a is a vague word.

However, quote 2 would be sufficient as the quote clarifies that the vague word is used to refer to a physical act. Also, quotes 1 and 3 together would be sufficient to make a coding, as quote 3 makes it clear that the aggression was physical.

It should be noted that the words ‘violence’, ‘attacked’ and ‘assaulted’, though not completely clear about the nature of the act, are considered sufficient for a coding of physical abuse to be made. This is because in the vast majority of cases they are used to refer to physical abuse, (e.g. “he was violent to her”),

**Examples**

- Quote 1: ‘The father attacked the subject.’
- Quote 2: ‘The father assaulted the subject.’
- Quotes 1 or 2 by themselves would be sufficient to make a coding of physical abuse.

**Reference to a group of individuals being maltreated**

If the file refers to a group of individuals experiencing maltreatment, and this group includes the subject, then it is permissible to infer that the subject has experienced this form of maltreatment. This will usually be in the form of a reference to the children of a perpetrating parent. (E.g. ‘The father [of the subject] used to beat his children.’)
Dichotomous question: Did the subject experience physical abuse?

Code as present if the following criteria are met:

- At least one of the experiences occurred before the subject’s 16th birthday or the date of the subject’s first perpetration, whichever took place first.

And for that or those experience/s, the following are also met:

- Ensure that the guidelines on vague allegations and contradictory information given in the introduction have been adhered to.
- The criteria for physical abuse are met (see definition). Essentially, the act should be the same or similar to one of the acts described in the ‘Examples of Physical Abuse’ section.
- The perpetrator criteria are met (see definition)
- Examine the distinction between physical abuse and punishment, and make sure that behaviour meets the criteria for physical abuse, rather than just punishment.
- Examine the discussion of vague aggression to ensure that the quote meets the criteria for coding.
- Examine the discussion of marks to the body, to check whether a mark is needed to the body to make the coding.
- Examine the discussion of causes of marks to the body, to check whether the mark can be attributed to physical abuse.
- ‘Entering information in the correct factor’ needs to be examined to ensure that the experience does not belong to another factor.

If the criteria are not met, code ‘No’.
Examples of Physical Abuse

The following are examples of the types of behaviour that constitute physical abuse. If any of the following, or similar events, are found within the subject’s files and the additional criteria (stated above in ‘Dichotomous Question’ section) are also fulfilled, he may be coded as having been the victim of physical abuse.

1. Minor marks below the neck / no clear description

- The caregiver inflicted minor marks on the child’s body during a spanking; there were no marks to the neck or head. The term ‘minor marks’ includes redness, or use of the term minor marks, but not bruising of any kind.
- The perpetrator held the child in order to restrain him, but not by the head or neck. For a definition of ‘restraint’ see the top of this section.
- Reports indicated that the caregiver had ‘kicked’, ‘beaten’, ‘beaten up’ or ‘punched’ the child; no other information was given.
- The child received injuries that were documented to have occurred by non-accidental means.
- The perpetrator was reported to have spanked the child with an open hand or an object likely to inflict only minor marks in most cases (e.g. a soft belt, a ruler, a table tennis bat), with the child sustaining such marks on or below the shoulder.
- There is a report that physical abuse took place, but no other information is contained in the file.
- If the file states that the subject was on the Child Protection Register for ‘Physical Abuse’ or ‘Actual Physical Abuse’ and no other information is given, then this form of abuse can be assumed to have taken place. If the file states that the subject was on the Child Protection Register for ‘Potential Physical Abuse’ or any variation on that phrase (e.g. ‘Grave Concern’ or ‘Likely’) then, in the absence of further information, this is not to be coded as experiencing violence.

Examples
- Redness on the child’s bottom was reported following a spanking with the belt.

2. Non minor marks below neck

- The caregiver inflicted a bruise or bruises to the child’s body from an incident.
- The caregiver spanked the child with an object likely to leave a non minor mark (e.g. a hair brush, a belt buckle, an electric cord).

Examples
- The child sustained welts on the back after being beaten with a hair brush.
- The child was beaten with an electric cord, resulting in numerous marks.

3. Marks or restraint to neck or above / serious bruising, minor lacerations, minor burns

- The caregiver inflicted marks on the child’s head, face, or neck (e.g. a black eye).
- The perpetrator used restraint (see definition) on the subject involving contact with the subject on the head or neck.
- The caregiver’s rough handling of the child resulted in serious bruising or minor lacerations (e.g. require stitches or minor medical attention).
- The caregiver inflicted minor burns (e.g. minor cigarette burns) to the child’s body.

Examples
- The child received a hand print on the neck after the parent grabbed him.
- The child had a black eye resulting from being punched in the face.
- Small circular burns on the child’s hands were identified as cigarette burns.
4. Serious injuries but not hospitalised / <24 hrs hospitalisation / asphyxiation

- The caregiver hit the child with an object (e.g. a baseball bat, a telephone) likely to result in serious injury (e.g. non-minor lacerations, second degree burns, fractures, or concussion), or threw the child against the wall, but injuries that were sustained did not require hospitalisation, according to available medical information.

- The caregiver attempted to choke or smother the child, but no emergency medical care was required.

- The caregiver inflicted serious burns (second degree) to the child's body, but the injury did not require hospitalisation.

- The caregiver inflicted an injury that required some hospital care, such as treatment in a casualty department, but did not require hospitalisation for more than 24 hours (e.g. stitches, fractures, non-minor sprain). Also score at this level if the subject was hospitalised, but the file does not state the duration of the hospitalisation.

Examples
- The child was beaten with a board that had nails in it. The child received bruises and cuts.
- The child was thrown downstairs, and fractured one arm.
- The child was severely burned by the parent and was treated in a casualty department.

5. Twenty four hours or more hospitalisation / permanent damage

- The caregiver inflicted an injury to the child that required hospitalisation for more than 24 hours (e.g. internal injuries) and/or that was permanently physically damaging, or disfiguring (e.g. resulting in brain damage, severe scarring, crippling).

Examples
- The child was set on fire, resulting in severe burns that were permanently disfiguring.
- The child was hospitalised for one week for internal injuries and evidence of a shaken infant syndrome.
Witnessing Intrafamilial Physical Abuse

**Definitions**

**Definition of witnessing**

Witnessing is defined as the subject being either visually or aurally exposed to, but neither a recipient nor a perpetrator of, an event of intrafamilial physical abuse. The file must clearly state, or the coder must be able to reasonably infer, that the physical abuse was not directed towards or perpetrated by the subject.

There are a number of means by which we surmise that a subject witnessed intrafamilial physical abuse. Witnessing can be inferred only if at least one of the following constellations of criteria are met:

**EITHER**

**Both these criteria must be met:**

- It is clearly stated that the subject witnessed intrafamilial physical abuse. (E.g. ‘The subject saw the mother being punched in the stomach by the father’.)
- Perpetrator and victim criteria (see below) are met.

In the absence of a statement confirming that the subject witnessed the event, witnessing can be presumed to have occurred if one of the three following instances apply:

**OR**

All three of the criteria below must be met:

- There is a general statement about a violent relationship between a victim and a perpetrator. (Examples of general statements: ‘The father used to hit the mother’; ‘The father said he saw nothing wrong with disciplining the children using a walking stick.’)
- Perpetrator and victim criteria (see below) are met
- **The subject, perpetrator and victim have all lived together at some point in the subject’s life.**

**NOTE:** If there is a clear statement or it can be reasonably inferred that the subject did not witness intrafamilial physical abuse, despite the above criteria being met, then obviously do not code it as witnessing.

**OR**

If the only evidence is statement about a specific event or series of events then more stringent criteria apply. Note that all three criteria must be met.

- There is a specific statement about a violent event between a victim and a perpetrator (e.g. ‘On 6th June, Mrs X was taken to hospital after been beaten up by her husband)
- Perpetrator and victim criteria (see below) are met
- The subject, perpetrator and victim were living together during at least one of the events.

**NOTE:** If there is a clear statement or it can be reasonably inferred that the subject did not witness intrafamilial violence, despite the above criteria being met, then obviously do not code it as witnessing.

**OR**

Finally, witnessing can also be inferred if the following three criteria are met:

- There is a specific statement about a violent event between a victim and a perpetrator (e.g. ‘On 6th June, Mrs X was taken to hospital after been beaten up by her husband)
- Perpetrator and victim criteria (see below) are met
- Although the subject, victim and perpetrator were not living together during the event, it is clear that at least one of the events took place in the house where the subject was living. (Note that this criteria is met even if neither the victim nor perpetrator are also resident; it is only necessary for the subject to be living there.)

**NOTE:** If there is a clear statement or it can be reasonably inferred that the subject did not witness intrafamilial violence, despite the above criteria being met, then obviously do not code it as witnessing.
Restraint

Restraint is defined as a positive action by the perpetrator, involving physical contact between the subject and a device such as a rope or flex which has been specifically employed by the perpetrator to prevent the subject's free movement.

Perpetrator Criteria

Perpetrator and victim criteria

A violent event between two individuals meet the criteria for this factor if EITHER one of the victims OR one of the perpetrators is a family member. A family member is anyone who would score at level two or above in the closeness ratings given in the introduction. The following is a brief overview of individuals who meet the criteria, if in doubt consult the closeness ratings. Anyone referred to in familial terms, including extended family. It includes: parents, siblings, grandparents, uncles, aunts and cousins. Note that it also includes foster and siblings. In addition, individuals who have cared for the subject for one month or more also meet the criteria. Also note that boyfriend of mother and girlfriend of father are only considered family members if they have cared for the subject for a month or more.

Occasionally the violence between family members will not have a clearly defined perpetrator and a clearly defined victim, instead both individuals will be fighting with each other. (E.g. ‘The mother and father would often have extremely violent fights involving punching and kicking.’) In these situations, both individuals are to be classed as perpetrators.

Entering information in the correct factor

Frequently during the trawling process, the trawler is likely to come across quotes which appear to fit within two or more categories. The following guidelines are intended to enable reliable allocation of the quotes.

In the event that an individual (e.g. psychiatrist, psychotherapist, judge) contradicts the current classification system in any comments that (s)he makes (e.g. refers to a sexually abused child as emotionally abused because of his sexual victimisation), record the relevant quote and allocate it according to the system in this manual. Make a note in the notes section giving the reasoning for the allocation adopted.

Witnessing intrafamilial violence and Rejection by carers

Witnessing intrafamilial violence is to entered into this section only, it is not to be entered in the 'Rejection by carers' section.

Experiencing physical abuse and witnessing intrafamilial violence

If a family member simultaneously physically abuses both the subject and another family member then this event is to be coded in both experiencing physical abuse and witnessing intrafamilial violence. If the subject accidentally becomes caught up in violence involving two family members, and is himself physically abused in some way, then this too is to be recorded in both factors.
Dealing with potential problems

Marks to the body

For some of the acts that count as physical abuse, there is not a requirement of marks to the body. These are:

- Restraint of an individual
- In the case of behaviours that involve an individual being hit with an instrument, or if there is a mention of him/her being 'kicked', 'beaten', 'beaten up', 'thumped' or 'punched'
- A report that physical abuse took place, or the individual is on the Child Protection Register under the category of 'Physical Abuse' or 'Actual Physical Abuse', but there is no more information about the physically abusive acts.
- An individual is smothered or choked.
- An individual is hospitalised because of a physically abusive act.

Cause of marks to the body

Note that it must be clearly stated or reasonably inferred that the mark was a result of the physical abuse by a perpetrator, rather than a result of some non abusive source.

Clearly stated

E.g. ‘The brother had a black eye which he got from being punched by the father’
Here it clearly states that the mark was a result of the physically abusive act. This factor could be scored as present on the basis of this quote, provided other relevant criteria were met.

Reasonably inferred

E.g. ‘The father was violent towards the subject’s brother, who would often turn up at casualty with injuries.’
The proximity of the two clauses (father’s violence, hospitalisation) means that we can interpret the injuries as resulting from the father’s violence. This factor could be scored as present on the basis of this quote, provided other relevant criteria were met.

Neither clearly stated or reasonably inferred

E.g. ‘The brother had a number of bruises on his back.’
Here there is no indication that the bruises were caused by physical abuse. Therefore, this factor cannot be scored on the basis of this fact alone, even if other relevant criteria were met.

Also note that a paediatrician (or anyone else’s) suspicion that a mark occurred by non accidental means is not sufficient; there must be a degree of certainty rather than a suspicion.

Witnessing Intrafamilial Violence vs. Witnessing Punishment

It is important in this section to distinguish quotes concerning witnessing intrafamilial violence, which we are interested in, from non abusive physical punishment, which we are not. Punishment is regarded as non abusive if it involves appropriate setting of boundaries and does not result in marks being left on the subject. However, if an action witnessed by the subject, is referred to as punishment and is deemed to be inappropriate by a social worker or a clinician, it is to be coded as witnessing intrafamilial violence. A coding of ‘witnessing intrafamilial violence’ will also be made if behaviours mentioned within the ‘Examples of Witnessing Intrafamilial Violence’ section below are recorded as having been witnessed by the subject.

The following words could potentially be interpreted either as punishment or violence, however the mention of marks or bruises of some kind should result in a coding of violence: hit, slapped, spanked, smacked or cracked.

If the victim is not an adult, and in the absence of information indicating a physical mark, these cannot be coded under ‘witnessing intrafamilial violence’, even if they were witnessed by the subject.

However, ‘hit’, ‘slapped’, ‘smacked’ or ‘cracked’ can be coded at severity level 1, in the absence of marks, if both the victim and the perpetrator are adults. Example: ‘The mother [of the subject] frequently reports being hit by her husband [father of the subject].’
In the case of behaviours that involve the subject witnessing someone being hit with an instrument, or if there is a mention of him witnessing the victim being 'kicked', 'beaten', 'thrashed', 'beaten up', 'thumped' or 'punched', the mention of marks is not necessary. For example, it is enough to know that the subject witnessed someone being hit with a board with nails sticking out of it for a coding of witnessing intrafamilial violence to be made, provided the victim or perpetrator was a family member.

**Vague aggression**

Even when it is clear that the subject witnessed an event, it is not always clear that it constituted physical abuse. There are a number of words or phrases which may appear to indicate physical abuse, but are extremely vague in that they are often used to refer to both verbal and physical abusive behaviour.

These words include the following: aggressive/ly, forceful/ly, hostile/hostility, stormy (relationship), turbulent (relationship).

These should be taken as possible indicators of physical abuse, and the quote containing the phrase should be extracted, but they are not sufficient in themselves for a coding of witnessing intrafamilial violence to be made. A coding can only be made if it is clear, or it can be reasonably inferred that the act involved physical contact. This will mean that either there are other quotes which state there was physical contact, or the quote itself indicates that there was contact.

**Examples**

- **Quote 1:** 'The subject was exposed to the father’s aggressive relationship with his mother.'
- **Quote 2:** 'The subject frequently saw evidence of the father’s hostile relationship with his mother, who would often have to go to casualty with injuries.'
- **Quote 3:** 'The subject saw his father punch and kick his mother.'

Quote 1 on its own would not be sufficient to make a coding of witnessing intrafamilial violence as the only evidence is a vague word. However, quote 2 would be sufficient as the quote clarifies that the vague word is used to refer to a physical act.

Also, quotes 1 and 3 together would be sufficient to make a coding, as quote 3 makes it clear that the aggression was physical.

It should be noted that the words ‘violence’, ‘attacked’ and ‘assaulted’, though not completely clear about the nature of the act, are considered sufficient for a coding of physical abuse to be made. This is because in the vast majority of cases they are used to refer to physical abuse, (e.g. “he was violent to her”),

**Examples**

- **Quote 1:** ‘The subject saw his father attack his grandfather.’
- **Quote 2:** ‘He had witnessed his father assaulting the policeman.’

Quotes 1 or 2 by themselves would be sufficient to make a coding of physical abuse.
Dichotomous question: Did the subject witness intrafamilial physical abuse?

Code as present if the following criteria are met:
• At least one of the experiences occurred before the subject's 16th birthday or the date of the subject's first perpetration, whichever took place first.
And for that or those experience/s, the following are also met:
• Ensure that the guidelines on vague allegations and contradictory information given in the introduction have been adhered to.
• The general criteria for witnessing are met, and at least one of the witnessing criteria of constellations are met.
• The criteria for physical abuse are met (see definition).
• Examine the perpetrator and victim criteria to check that they are met.
• Examine the discussion of vague aggression to ensure that the quote meets the criteria for coding.
• Examine the discussion of marks to the body, to check whether a mark is needed to the body to make the coding.
• Examine the discussion of causes of marks to the body, to check whether the mark can be attributed to physical abuse.
• Experiences constituting witnessing intrafamilial physical abuse are any of those described in 'Examples of Witnessing Intrafamilial Physical Abuse'; essentially, the act should be the same or similar to one of the acts described in this section.

If the criteria are not met, code 'No'.
Examples of Witnessing Intrafamilial Physical Abuse

The following are examples of the types of behaviour that may constitute witnessing intrafamilial physical abuse. If any of the following, or similar events, are found within the subject’s files and the additional criteria (stated above in ‘Dichotomous Question’ section) are also fulfilled, he may be coded as having witnessed intrafamilial physical abuse.

1. Minor marks below the neck / no clear description

- The perpetrator inflicted minor marks on the victim’s body during a spanking; there were no marks to the neck or head. The term ‘minor marks’ includes redness, soreness or use of the term minor marks, but not bruising of any kind.
- The perpetrator held the child in order to restrain him, but not by the head or neck. For a definition of ‘restraint’ see the top of this section.
- Reports indicated that the caregiver had ‘kicked’, ‘beaten’, ‘beaten up’, ‘thumped’ or ‘punched’ the victim; no other information was given.
- The victim received injuries that were documented to have occurred by non-accidental means.
- The perpetrator was reported to have spanked the victim with an open hand or an object likely to inflict only minor marks in most cases (e.g. a soft belt, a ruler, a table tennis bat), with the victim sustaining such marks on or below the shoulder.
- There is a report that physical abuse took place, but no other information is contained in the file.
- If the file states that a family member of the subject was on the Child Protection Register for ‘Physical Abuse’ or ‘Actual Physical Abuse’ and no other information is given, then this level is to be scored. If the file states that this victim was on the Child Protection Register for ‘Potential Physical Abuse’ or any variation on that phrase (e.g. ‘Grave Concern’ or ‘Likely’) then, in the absence of further information, this is not to be coded as experiencing violence.
- Note that, ‘slapped’, ‘smacked’ or ‘cracked’ can be counted, in the absence of marks, if both the victim and the perpetrator are adults.

Examples
- The victim felt soreness on the arm after being hit with an open hand.
- Redness on the victim’s bottom was reported following a spanking with the belt.
- The mother [of the subject] frequently reports being hit by her husband [father of the subject]

2. Non minor marks below neck

- The perpetrator inflicted a bruise or bruises to the victim’s body from an incident.
- The perpetrator spanked the victim with an object likely to leave a non minor mark (e.g. a hair brush, a belt buckle, an electric cord), or kicked or punched the victim with a fist, leaving marks on the victim’s body below the neck.

Examples
- The victim sustained welts on the back after being beaten with a hair brush.
- The victim was beaten with an electric cord, resulting in numerous marks.

3. Marks or restraint to neck or above / serious bruising, minor lacerations, minor burns

- The perpetrator inflicted marks on the victim’s head, face, or neck (e.g. a black eye).
- The perpetrator used restraint (see definition) on the subject involving contact with the subject on the head or neck.
- The perpetrator’s rough handling of the victim resulted in serious bruising or minor lacerations (e.g. require stitches or minor medical attention).
- The perpetrator inflicted minor burns (e.g. minor cigarette burns) to the victim’s body.

Examples
- The victim received a hand print on the neck after the parent grabbed him.
- The victim had a black eye resulting from being punched in the face.
• Small circular burns on the victim’s hands were identified as cigarette burns.

4. Serious injuries but not hospitalised / <24 hrs hospitalisation / asphyxiation

• The perpetrator hit the victim with an object (e.g. a baseball bat, a telephone) likely to result in serious injury (e.g. non-minor lacerations, second degree burns, fractures, or concussion), or threw the victim against the wall, but injuries that were sustained did not require hospitalisation, according to available medical information.
• The perpetrator attempted to choke or smother the victim, but no emergency medical care was required.
• The perpetrator inflicted serious burns (second degree) to the victim’s body, but the injury did not require hospitalisation.
• The perpetrator inflicted an injury that required some hospital care, such as treatment in a casualty department, but did not require hospitalisation for more than 24 hours (e.g. stitches, fractures, non-minor sprain). Also score at this level if the subject was hospitalised, but the file does not state the duration of the hospitalisation.

Examples
• The victim was beaten with a board that had nails in it. The victim received bruises and cuts.
• The victim was thrown downstairs, and fractured one arm.
• The victim was severely burned by the parent and was treated in a casualty department.

5. Twenty four hours or more hospitalisation / permanent damage

• The perpetrator inflicted an injury to the victim that required hospitalisation for more than 24 hours (e.g. internal injuries) and/or that was permanently physically damaging, or disfiguring (e.g. resulting in brain damage, severe scarring, crippling). The perpetrator inflicted a fatal injury.

Examples
• The victim was set on fire, resulting in severe burns that were permanently disfiguring.
• The victim was hospitalised for one week for internal injuries and evidence of a shaken infant syndrome.
Neglect (Failure to Provide)

Definitions

Definition of neglect (failure to provide)

Physical neglect, failure to provide, is coded when a caregiver (see definitions in introduction for main and primary caregiver) or responsible adult fails to exercise a minimum degree of care in meeting the child’s physical needs. When families are below the poverty level, physical neglect is scored if children’s physical needs are not met because the parents fail to access available community resources for the well-being of their children. For example, parents are unable to provide food for their children; however, they have not taken the necessary steps to seek sources of emergency sustenance.

Neglect (failure to provide) covers 5 domains:
- supplying the child with adequate food
- ensuring that the child has clothing that is sanitary, appropriate for the weather and permits the child freedom of movement
- providing adequate shelter
- ensuring adequate medical, dental, and mental health care
- ensuring the child’s adequate hygiene.

Restraint

Restraint is defined as a positive action by the perpetrator, involving physical contact between the subject and a device such as a rope or flex which has been specifically employed by the perpetrator to prevent the subject’s free movement.

Perpetrator criteria

The perpetrator of neglect has to be the main caregivers for the subject at the time of the experience of neglect. See the definition of main caregiver given in the introduction.

Entering information in the correct factor

Neglect failure to provide and neglect lack of supervision

An event may be coded for either or both forms of neglect as well as another maltreatment factor. Regardless of the other form of maltreatment, neglect failure to provide concerns the lack of essential necessities i.e. food; clothing; shelter; health care and hygiene, whereas neglect lack of supervision concerns the inadequate supervision of a child in either a safe or an unsafe environment.
**Neglect (failure to provide), physical abuse, neglect (lack of supervision), rejection by carers.**

Locking someone up and leaving them unattended can be scored under several types of maltreatment. This depends upon whether the subject was restrained and whether the criteria for ‘neglect, failure to provide’ and ‘neglect, lack of supervision’ are met. The following table summarises the distinctions for all situations. If the perpetrator locks the child up or confines the child, then this is to be scored under *rejection by carers* only.

<table>
<thead>
<tr>
<th>Type of Neglect</th>
<th>Subject Locked up</th>
<th>Criteria met for Neglect, FTP</th>
<th>Criteria met for Neglect, LOS</th>
<th>Criteria met for Neglect, FTP &amp; LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical restraint used</td>
<td>Physical restraint &amp; containment</td>
<td>contention only</td>
<td>Unsure about how subject was locked up</td>
<td></td>
</tr>
<tr>
<td>Physical abuse. + NFTP</td>
<td>Physical abuse. + NFTP</td>
<td>Rejection by carer + NFTP</td>
<td>Rejection by carer + NFTP</td>
<td></td>
</tr>
<tr>
<td>Physical abuse. + NLOS</td>
<td>Physical abuse. + NLOS</td>
<td>Rejection by carer + NLOS</td>
<td>Rejection by carer + NLOS</td>
<td></td>
</tr>
<tr>
<td>Physical abuse. + NFTP + NLOS</td>
<td>Physical abuse. + NFTP + NLOS</td>
<td>Rejection by carer + NFTP + NLOS</td>
<td>Rejection by carer + NFTP + NLOS</td>
<td></td>
</tr>
</tbody>
</table>

328
Dealing with potential problems

Vague reference to neglect

If the file refers to the neglect of the subject and no other information is given, then this quote should be extracted, but should NOT be coded in either Neglect - failure to provide or Neglect - lack of supervision. The same principle applies if the subject is on the Child Protection Register under ‘Neglect’ or ‘Actual Neglect’. If any other form of wording is used in reference to the Child Protection Register, then the criteria for neglect are not met.

Illness and neglect failure to provide

It should be noted that illness in itself does not indicate neglect: the criteria for neglect are only met if it is clearly stated or if it can be reasonably inferred that the illness resulted from a failure to provide by the caregivers or a failure to follow through with a course of treatment.

Neglect by Proxy

The coder will not infer that the subject is being neglected merely because one or more of his siblings are suffering this form of maltreatment. However, if in doubt, the trawler should record the item that describes the neglect of the sibling and let the coder decide about the neglect of the subject. In such cases, add a note for the coder, regarding your uncertainty.

Reference to a group of individuals being maltreated

If the file refers to a group of individuals experiencing maltreatment, and this group includes the subject, then it is permissible to infer that the subject has experienced this form of maltreatment. This will usually be in the form of reference to the children of a perpetrating parent. (E.g. ‘The father [of the subject] used to beat his children’; ‘The father [of the subject] has had anal intercourse with his two sons’.)

Dichotomous question: Did the subject experience neglect (failure to provide)?

Tick yes if the following criteria are met:

- At least one of the experiences occurred before the subject’s 16th birthday or the date of the subject’s first perpetration, whichever took place first.

And for that or those experience(s), the following are also met:

- Ensure that the guidelines on vague allegations and contradictory information given in the introduction are adhered to.
- The detailed definition of neglect - failure to provide must be read to ensure that the experience meets the criteria.
- The perpetrator criteria are met. Note that for neglect - failure to provide, the perpetrator is by definition the main caregiver; it is impossible for it to be anyone else.

If the criteria are not met, tick no.
Examples of Neglect (failure to provide)

The following are examples of the types of behaviour that may constitute Neglect (failure to provide). If any of the following, or similar events, are found within the subject’s files and the additional criteria (stated above in ‘Dichotomous Question’ section) are also fulfilled, he may be coded as having been subject to Neglect (failure to provide).

### Type 1 Neglect (f.t.p.)

- The caregiver does not ensure that food is available for odd meals. The subject (less than age 10) often has to fix his own supper and/or occasionally misses meals because of parental negligence. This also applies if the following words are used to describe the number of meals missed: once in a while, at times, now and then, now and again, every now and again, then and again, from time to time, rarely. It must be clear or inferable that the odd meal that has been missed - even if this is a rarity.
- The caregiver fails to provide clothing for the subject that is adequately clean and that allows freedom of movement (e.g. the clothing is so small that it restricts movement or so large that the subject often trips or has difficulty keeping the clothing on).
- The caregiver does not attempt to clean the house. Garbage has not been removed, dirty dishes are encrusted with food, and floors and other surfaces are very dirty. An unpleasant odour from garbage and debris permeates the living quarters.
- The caregiver has missed several of the subject’s medical or dental appointments, and often fails to take the subject to the doctor or dentist for ‘check-ups’ or ‘well baby’ appointments. The caregiver does not ensure that the subject is taken to the doctor’s health clinic for adequate immunisation and medical personnel have expressed concern.
- The caregiver does not attempt to keep the subject clean. The caregiver bathes the subject or washes the subject very infrequently. The subject brushes teeth only infrequently or not at all, and signs of tooth decay or discolouration are evident.
- There is a report that neglect took place, but no other information is contained in the file. Note that neglect - lack of supervision should not be coded as well on the basis of this information.
- The file states that the subject was on the Child Protection Register for ‘Neglect’ or ‘Actual Neglect’ and no other information is given. If the file states that the subject was on the Child Protection Register for ‘Potential Neglect’ or any variation on that phrase (e.g. ‘Grave Concern’ or ‘Likely’) then, in the absence of further information, this is not to be coded as neglect - failure to provide.

### Examples

- A 9 year old subject often fixes dinner for themselves because the caregivers are sleeping.
- A 9 year old subject occasionally misses dinner due to carer negligence. This would include situations where the subject misses no more than one meal per week.
- The subject always wears clothing that is so small it restricts movement.
- The caregiver has failed to sign papers for evaluation of a behaviour problem that has been reported at school.
- The subject is dirty and frequently scratches matted hair.
- Clothing is dirty and smells of urine.

### Type 2 Neglect (f.t.p.)

- The caregiver sometimes fails to ensure that food is available. This can be assessed by the number of meals missed or from more descriptive data. This includes situations where two or more meals are missed per week; the caregiver does not feed the subject for 24 hours; meals are described as being missed often, recurrently, repeatedly, or time and again. It must be clear or inferable that it is neither the odd meal that has been missed or the ‘norm’ for meals to be missed.
- The caregiver does not dress the subject in clothing that is appropriate for the weather (e.g. lightweight clothing during the winter).
- The caregiver is aware that the house is infested with roaches or other vermin and has not attempted to improve the conditions.
The caregiver does not ensure adequate sleeping arrangements for the subject (e.g. there are no beds or mattresses, or the mattresses are filthy and sodden with urine or other substance likely to promote the growth of mould or mildew.)

The caregiver seeks medical attention but does not follow-through consistently with medical recommendations for a minor illness or infection (e.g. prescribed medicine is not administered for mild infection, chronic head lice is not treated).

The caregiver does not change the infant's diapers frequently, often leaving the soiled diaper unchanged for several hours, resulting in diaper rash.

**Examples**

- A subject has walked to school several consecutive days wearing only a thin jacket without hat or gloves, throughout winter or during cold weather.
- A social worker has visited the home several times when no food has been available. The subject report that they do not have lunch or dinner two or three times per week.
- The subject has been diagnosed with an ear infection, but the parent does not follow through with administration of the prescribed antibiotic.

**Type 3 Neglect (T.3.p.)**

- The caregiver does not provide meals on an usual basis, thereby perpetuating a pattern of regularly missed meals: as many as four or more periods of at least two consecutive meals per week are unavailable to the subject. Also code the severity as '3' if the meals are described as being missed all the time, continually, usually, regularly, perpetually, generally, more often than not. It must be clear or inferable that it is the 'norm' for meals to be missed.
- The caregiver fails to make adequate provisions for shelter for the family. For example, the caregiver does not acquire or maintain public assistance, resulting in a loss of residence or loss of financial assistance for seven days or more.
- The caregiver does not seek or follow through with medical treatment for moderately severe medical problems (e.g. the caregiver does not follow preventative measures for a chronic heart condition, or moderately elevated blood lead levels are left untreated), or the caregiver administers medical treatment that is inappropriate without consulting a doctor (e.g. caregiver gives the subject mild sedatives to control the subject, without a doctors consultation).
- The caregiver maintains an unsanitary living situation, where spoiled food or garbage are frequently present and where rat or vermin infestation is untreated.
- The expectant mother jeopardises the health of her unborn subject by using alcohol or drugs during pregnancy, but no foetal or alcohol or drug symptoms are evident.

**Examples**

- The subject is regularly not fed. He has missed two consecutive meals an average of four times a week for the last several months.
- The family has been evicted because the parent did not take appropriate actions to maintain public assistance and made no other arrangement for making rent payments. The family had no stable living arrangements for 2 weeks.
- The parent has been drunk several times during pregnancy
- The subject has come to school with an infected cut. Despite notes form the school nurse recommending medical attention, the cut continues to be untreated.
- A social worker has visited the home several times, and each time the house has been a mess. Dirty and mouldy plates were all over the kitchen table, counters and sinks. Rats were seen in the open garbage bins by the front door.
- The subject is emotionally disturbed and is in a treatment program. The caregiver has not sent the subject to the program for six weeks.

**Type 4 Neglect (T.4.p.)**

- The caregiver has made no arrangements for adequate shelter (e.g. the caregiver has not sought heat during the winters; the family is living in a car because no alternative housing was sought). The conditions continue for prolonged periods.
• The caregiver maintains the home environment such that living conditions are extremely unhealthy (e.g. faeces and urine are present in the living areas).

• The caregiver does not seek or comply with medical treatment for potentially life threatening illness or injury (e.g. the subject is not taken to the Emergency Room for severe bleeding, third degree burn, fractured skull).

• The caregiver has provided such poor nourishment that the subject fails to gain weight or grow at the rate expected for their development. The failure to grow as expected is not due to any identifiable organic failure. In addition, the failure to grow must be stated by a health care worker as being caused specifically by the carer’s neglect. This should not be just assumed by the coder.

Examples

• The subject lives in an unheated home because the parents have failed to ensure that heating was available. During the winter, the subject came to school with frostbite.

• The subject was hit by a car, receiving a fracture and severe cuts and bruises. The subject came to school complaining of pain and stated that the parents would not take him to the hospital.

Type 5 Neglect (f.t.p.)

For the first three examples below, the subject’s condition must be attributed to the carers’ neglect by a health care professional, not simply assumed by the coder.

• The caregiver has provided such poor nourishment or care to the subject that physical consequences have ensued such as weight loss in an infant, severe malnutrition, or severe non-organic failure-to-thrive.

• The caregiver has abused alcohol or drugs during pregnancy to the extent that the infant is born with foetal abnormality syndrome or a congenital drug addiction.

• The caregiver provided such gross inattention to the subject’s medical needs that the subject was permanently disabled as a result of lack of medical attention (e.g. severe starvation, dehydration).

• The caregiver does not seek professional help for the subject’s life threatening emotional problems (e.g. suicidal or homicidal attempts).

Examples

• At birth, the subject is addicted to heroin.

• The subject is diagnosed as being severely malnourished.

• The caregiver was informed that the subject had expressed suicidal ideation, but the caregiver did nothing to ensure the subject’s safety.
Physical neglect (lack of supervision)

Definitions

Lack of supervision

Within this system, lack of supervision is coded when a main caregiver (see definition in introduction) does not take adequate precautions to ensure a child's safety in and out of the home, given the child's particular emotional and developmental needs. The parent's failure to ensure the child's safety may include both permitting the child to be exposed to dangerous situations (e.g. allowing the child to play in an unsafe area, permitting the child to accompany someone with a known history of violent acts) as well as failing to take adequate precautions to evaluate the conditions pertaining to the child's safety (e.g. neglecting to screen the background or competency of alternative caregivers, failing to ascertain the child's whereabouts).

There are four broad elements that caregivers may violate to jeopardise children's physical safety:

1: Supervision - failing to take steps to ensure that the child is engaging in safe activities.
To assist coders in making decisions about instances of lack of supervision, examples have been provided of inadequate supervision of various different durations (see 'Examples of Neglect - lack of supervision' section).

2: Environment - failing to ensure that the child is playing in a safe area.
This dimension is distinguished from lack of hygiene or medically unhealthy conditions of the living environment covered under failure to provide. In the case of lack of supervision, environment refers to immediate physical dangers inside or outside the home such as broken glass, unguarded electrical fixtures, toxic chemicals, and firearms.

3: Substitute care - failing to provide for adequate substitute care in the caregiver's absence or mental or physical incapacity.
In this respect, lack of substitute care includes situations when auxiliary supervision is not obtained, when parents do not ensure that substitute caregivers are able to adequately supervise the child, when caregivers are unable to adequately monitor the child's safety because the caregivers are intoxicated with alcohol or drugs, or when caregivers have a severe psychiatric condition that makes appropriate supervision of children highly unlikely (e.g. caregiver has delusions or hallucinations).

4: Developmental needs - failing to recognise the developmental needs of the child in providing adequate supervision to ensure the child's safety.
Because, in general, the consequences of failing to supervise younger children are potentially more serious, the influence of the child's developmental level should be considered when making decisions about whether there was a parental failure to provide adequate supervision.

Additionally children who have a history of dangerous, impulsive or immature behaviour require more intensive supervision. For example, an adolescent who is known to exhibit poor judgement and to engage in impulsive and destructive behaviour would require more supervision than most children of the same age. It is difficult to quantify the amount of supervision that is required at each developmental level. The examples provided give some guidelines of relative severity, but the information available for each case must be considered with regard to the age and particular needs of each child.
Perpetrator criteria

The perpetrator of neglect has to be the main caregivers for the subject at the time of the experience of neglect. See the definition of main caregiver given above.

Entering information in the correct factor

Neglect failure to provide and neglect lack of supervision

An event may be coded for either or both forms of neglect as well as another maltreatment factor. Regardless of the other form of maltreatment, neglect failure to provide concerns the lack of essential necessities i.e. food; clothing; shelter; health care and hygiene, whereas neglect lack of supervision concerns the inadequate supervision of a child in either a safe or an unsafe environment.

Neglect (lack of supervision), physical abuse, neglect (failure to provide), rejection by carers.

Locking someone up and leaving them unattended can be scored under several types of maltreatment. This depends upon whether the subject was restrained and whether the criteria for 'neglect, failure to provide' and 'neglect, lack of supervision' were met. The following table summarises the distinctions for all situations, but these are expanded upon afterwards:

<table>
<thead>
<tr>
<th>Type of Neglect</th>
<th>Subject Locked up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical restraint used</td>
<td>Physical restraint &amp; containment</td>
</tr>
<tr>
<td>Criteria met for Neglect, FTP</td>
<td>Physical abuse + NFTP</td>
</tr>
<tr>
<td>Criteria met for Neglect, LOS</td>
<td>Physical abuse + NLOS</td>
</tr>
<tr>
<td>Criteria met for Neglect, FTP &amp; LOS</td>
<td>Physical abuse + NFTP + NLOS</td>
</tr>
</tbody>
</table>
Dealing with potential problems

Vague reference to neglect

If the file refers to the neglect of the subject and no other information is given, then this quote should be extracted, but should NOT be coded in either Neglect - failure to provide or Neglect - lack of supervision. The same principle applies if the subject is on the Child Protection Register under ‘Neglect’ or ‘Actual Neglect’. If any other form of wording is used in reference to the Child Protection Register, then the criteria for neglect are not met.

Neglect by Proxy

The coder will not infer that the subject is being neglected merely because one or more of his siblings are suffering this form of maltreatment. However, if in doubt, the trawler should record the item that describes the neglect of the sibling and let the coder decide about the neglect of the index. In such cases, add a note for the coder, regarding your uncertainty.

Reference to a group of individuals being maltreated

If the file refers to a group of individuals experiencing maltreatment, and this group includes the subject, then it is permissible to infer that the subject has experienced this form of maltreatment. This will usually be in the form of reference to the children of a perpetrating parent. (E.g. ‘The father [of the subject] used to beat his children’; ‘The father [of the subject] has had anal intercourse with his two sons’.)

Dichotomous question: Did the subject experience neglect (lack of supervision)?

Tick yes if the following criteria are met:

- At least one of the experiences occurred before the subject’s 16th birthday or the date of the subject’s first perpetration, whichever took place first.

And for that or those experience/s, the following are also met:

- Ensure that the guidelines on vague allegations and contradictory information given in the introduction have been adhered to.
- The detailed definition of neglect - failure to provide must be read to ensure that the experience meets the criteria.
- The perpetrator criteria are met. Note that for neglect - lack of supervision, the perpetrator is by definition the main caregiver; it is impossible for it to be anyone else.

If the criteria are not met, tick no.
Type 1 Neglect (I.O.S.)

- The caregiver fails to provide adequate supervision or arrange for alternate supervision for short periods of time (e.g. up to a morning, an afternoon or an evening i.e. approximately less than three hours) with no immediate source of danger in the environment.
- If the file refers to the neglect of the subject and no other information is given, then this quote should NOT be coded in either Neglect - failure to provide or Neglect - lack of supervision. The same principle applies if the subject is on the Child Protection Register under ‘Neglect’ or ‘Actual Neglect’. If any other form of wording is used (e.g. ‘Grave Concern’ or ‘Likely’) then, in the absence of further information, this is not to be coded as under either of the neglect factors.

Examples
- An eight year old is left alone during the day for a few hours.
- Pre-schoolers play outside unsupervised or are left in the care of an 8 year old. (In this case, the pre-schoolers who are unsupervised in an environment with a few hazards reported would constitute neglect (I.O.S.). Similarly supervision of pre-schoolers by a slightly older subject would represent inadequate alternate supervision.
- Subject is left in the care of questionably suitable baby-sitters (e.g. pre-adolescent, mildly impaired elderly person).

Type 2 Neglect (I.O.S.)

- The caregiver fails to provide supervision or arrange for alternate adequate supervision, or provides poor supervision for a ‘working day’ (i.e. approximately three to eight hours), with no immediate source of danger in the environment. A ‘working day’ refers to the time a carer would be away from home in order to perform a day’s work which will obviously vary depending on the nature of the work done. It does not refer to a ‘whole day’, which is the time between when the subject gets up in the morning and when he goes to bed for the night.
- The caregiver fails to provide supervision for short periods of time (e.g. up to a morning, an afternoon or an evening i.e. approximately less than three hours) when the subject is in an unsafe play area.
- The subject receives inadequate supervision despite a history of problematic behaviour (e.g. impulse behaviour, hyperactivity).

Examples
- The subject is frequently left alone for the day, without a responsible caregiver available.
- An infant is left in the care of an 8 year old for several hours. In this case both the infant and the eight year old would have been subject to neglect (I.O.S.).
- A six year old is locked out of the home alone, and the caregiver does not return until the evening.
- The subject is allowed to play in an unsafe play area (e.g. broken glass present, old basement garage cluttered with toxic chemicals, power tools or an old refrigerator) unsupervised.
- Subject gets into trouble with neighbours because of lack of supervision.

Type 3 Neglect (I.O.S.)

- The caregiver fails to provide adequate supervision for a ‘whole day’ (i.e. the time between when the subject gets up in the morning to when he goes to bed for the night) or a ‘whole night’ (i.e. the time between when the subject goes to bed for the night to when he gets up in the morning).
- The caregiver allows the subject to play in an unsafe play area for up to a ‘working day’, (approximately 3 to 8 hours).
Examples
- The subject is left unsupervised for the night.
- The subject often sees no one for the whole day, other than his younger siblings.
- The subject is left in the care of an unreliable caregiver (e.g. who is known to drink, or is extremely inattentive, or the parent makes no attempt to ensure that the caregiver was reliable) for the whole day.

Type 4 Neglect (L.o.s.)
- The caregiver provides no supervision for more than a whole day/night, but less than 24 hours.
- The caregiver allows the subject to play in an area that is very dangerous (i.e. high probability that the subject will be hit by a car or fall out of a window, get burned, or drown).
- A subject with a known history of destructive or dangerous acts (e.g. fire-setting, suicidal ideation) is left unsupervised.

Examples
- A carer goes to work one morning, leaving his school-age son alone, only to return drunk at three the next morning.
- The subject is allowed to play by highway, or on the roof of a condemned building.
- The subject is allowed to go with a caregiver who has known history of violence and/or acts against subject or who has a restraining order prohibiting contact with the subject.

Type 5 Neglect (L.o.s.)
- The caregiver fails to provide adequate supervision for 24 hours or more.
- The caregiver places the subject in a life threatening situation, or does not take steps to prevent the subject from being in a life-threatening situation.

Examples
- A pre-school subject is left alone for 24 hours.
- The subject is kicked out of the home with no alternative living arrangements.
- The caregivers keeps loaded firearms in a location that is accessible to the subject.
- A toddler plays near a swimming pool unsupervised. (Note that for a toddler being unsupervised near water is considered life threatening because of the highly frequency of deaths by drowning to this age subject.)
Rejection by carers

Definitions

Rejection by carers

This subtype is often underlined by the carer’s feelings of dislike or hostility towards the child. When this form of maltreatment occurs, the whole family often adopts the same stance towards the individual. However, under the current definition, only the child’s carers can be counted as perpetrators of this form of maltreatment and at least one carer must display one of the forms of rejecting behaviour listed below for this factor to be coded as present. The carer’s dislike of, or hostility towards the child, may be based on the child being seen as bearing the same negative characteristics as a disliked or hated person. Another context in which this subtype may exist is where the child is deemed (consciously or unconsciously) to be responsible for a misfortune that has befallen the carer. Examples of this are: illness associated with pregnancy or childbirth, loss of employment, loss of a partner. It may be that the misfortune was not in any way caused by the presence of the child, but merely became associated with the child in the carer’s mind, leading to feelings of hostility towards the child. It may also be the case that, for some parents, the child was, and is, actually unwanted, and that feelings of dislike and hostility ensue from the carer’s obligation to look after the child.

The feeling of dislike may be manifest behaviourally in several ways:
- Blaming: including references to blaming the subject, ‘scapegoating’, ‘targeting’, and negative misattribution
- The subject is perceived as deserving harsh discipline and punishment
- Hostility: expression of hostility towards the subject
- Degradation: including references to degrading the subject, criticising the subject
- Rejection: including references to rejection, hostility towards the subject, threats to remove the subject from the home or kill the subject, preference for another person, disliked because resemble another person
- Locking up or containing the child

Examples

Blaming
‘Both the father and mother blamed the child for the break-up of their marriage.’
‘The mother blames her son [subject] for the suicide of her boyfriend.’
‘The child is very much scapegoated within the family.’

The child is perceived as deserving harsh discipline and punishment
The subtype can only be coded if there is evidence of harsh discipline and punishment, and the carer states that the subject is deserving of such discipline and punishment.

Hostility
‘The mother shouts and screams at the child.’
‘The mother has told the child that she dislike him.’
‘The mother told the boy that she wished he were dead.’

Degradation
‘The mother belittles the child, referring to him as a wimp and a loser.’
‘The father states that he wishes the child was dead’

Rejection
The child ‘was rejected from the anti-natal stage although there have been periods of relative calm.’

Threats to have the subject removed from the home or kill the subject
‘Threats have been held over the child that her carers are going to get rid of her and are intending to have a new baby to replace her.’
Step-father ‘has requested him to be accommodated. There have been two visits on an emergency basis when the step-father has threatened to kill the child if he is not removed’.
Preference for another person
'The mother made it clear that if it came down to a choice between her son [subject] and her boyfriend, she would choose the boyfriend.'
'The father made it clear that he much preferred his natural son to his adoptive son [subject].'

Disliked because resembles another person
Mother told the social worker 'how she wished she never had any children, how she wished she had aborted, and would like someone to take them away - all said in the child's presence. She threatens the child with the social worker taking him away if he is not good'.

---

Perpetrator criteria
The perpetrator of 'Rejection by carers' has to be the main caregiver for the subject prior to or at the time of the experience of rejection. See the definition of main caregiver given in the introduction.

---

Entering information in the correct factor
Frequently during the trawling process, the trawler is likely to come across quotes that appear to fit within two or more categories. The following guidelines are intended to enable reliable allocation of the quotes.

In the event that an individual (e.g. psychiatrist, psychotherapist, judge) contradicts the current classification system in any comments that (s)he makes (e.g. refers to a sexually abused child as emotionally abused because of his sexual victimisation), record the relevant quote and allocate it according to the system in this manual. Make a note in the notes section giving the reasoning for the allocation adopted.

Neglect (lack of supervision) and Rejection by carers
If the perpetrator locks the child up or confines the child, then this is to be scored under 'Rejection by carers'. In addition, it must be clear that this act is intended to deprive the child access to the carer and not simply a result of the carer's absence. Note that this refers to locking up and confining the child; if the child is left unattended, the action would usually only be scored under neglect (lack of supervision).

---

Dealing with potential problems
Feelings and attitudes
Occasionally, there is a statement of the carer's feelings or attitudes to the subject, without a description of a behaviour (e.g. the father has admitted to hating the subject). In these situations it is permissible to code 'Rejection by carers' solely on the basis of a feeling or attitude; the assumption being that the feeling or attitude is likely to be manifest. Also note that it is permissible to make this coding whether or not it is stated that the subject heard or was aware of the feeling or attitude.
**Single instance of the behaviour**

'Rejection by carers' is conceptually defined as interactional patterns that are a pervasive characteristic of a parent-child relationship. Often in the files there is a description of a single instance of a behaviour, that if it was a pervasive characteristic of the relationship would be 'rejection by carers'. (E.g. A social worker visits the mother and child at home, and reports that the mother belittled the child.) It is permissible, in the absence of evidence to the contrary, to assume that this single instant was representative of a pervasive feature of the relationship, and to code 'Rejection by carers' as present on that basis. If it is stated or can be reasonably inferred that the single instant was not representative of the relationship, then do not code 'Rejection by carers' as present.

**Vague references to Emotional maltreatment**

If the file states that a subject has experienced 'emotional maltreatment' then this is not sufficient in itself to be coded under 'Rejection by carers'.
If the file states that a subject has experienced 'emotional abuse' then this is sufficient in itself to be coded under 'Rejection by carers'.

If the description of the emotional maltreating behaviour is so vague that it may not refer to this particular type of emotional maltreatment, then in the absence of additional information, do not code as Rejection by carers.

**Examples**

'The mother puts her own feelings before that of the child'
Dichotomous question: Did the subject experience Rejection by carers?

Code as ‘present’ if the following criteria are met:
• At least one of the experiences occurred before the subject’s 16th birthday or the date of the subject’s first perpetration, whichever took place first.
And for that or those experience/s, the following are also met:
• Ensure that the guidelines on vague allegations and contradictory information given in the introduction have been adhered to.
• Check to ensure that the perpetrator criteria are met
• ‘Entering information in the correct factor’ needs to be examined to ensure that the experience does not belong to another factor.

If the criteria are not met, code ‘absent’.
Discontinuity of Care

Definitions

The definitions for Main caregiver, Primary Carer, Care Unit and Separation are given in the introduction in the section entitled “Stage 4: Construction of a care table”. These definitions are very important to this section. Please refer to them in detail.

Dealing with potential problems

Establishing duration of contact or separation

A separation can be coded only if the subject is separated from someone who has cared for the subject for one year or more, and when that separation lasts for one month or more. The following provides guidelines on when it is permissible to infer the duration of care or the separation meets this criterion.

Duration of one month or one year can be inferred in the following circumstances:

Start date and end date are clearly stated, and the difference between the two is equal to or greater than 28 days or 365 days
Examples:
Mother left home on 20 February 1984 and returned home on the 21 March 1984.
Mother left home on 20 February 1984 and returned home on 20 February 1985.

The month of both dates is given, and the difference must be greater than one month or one year
Examples:
Father left home in February 1984 and returned home in April 1984.
Father left home in February 1984 and returned home in March 1984.

One date is given, and it can be reasonably inferred that there is one month or more / one year or more difference between the two dates
Examples:
Mother left home on 1 February 1984, and returned home mid April 1984.
Mother left home on 1 February 1984, and returned home mid February 1985.

No date is given but a duration is given, and that duration is equal or greater than one month / one year.
Examples:
The father left the home for 28 days / four weeks / one month
The father left the home for 365 days / 52 weeks / twelve months / one year

References to early / mid / late
References to early, mid or late portions of a month or year may sometimes be sufficient
Examples
The mother left the home in mid February 1984 and returned home late March 1985
The mother left the home in mid 1984 and returned home in late 1987

Other acceptable combinations
There are a number of other acceptable combinations, based on variations of the above,
Examples:
The mother left in mid 1987 returned in December 1988 would be fine.

But if any doubt, do not count as a separation.

Duration of one month or one year cannot be inferred in the following circumstances:
References to early / mid / late

Examples:
'Father left in February 1986 and returned in March 1986.'

'Mother left in mid 1986 and returned in mid 1987.'

Again, if in any doubt, do not count as a separation.
Dichotomous question: Did the subject experience one or more separations?

Code as present if the following criteria are met:
- At least one of the experiences occurred before the subject's 16th birthday or the date of the subject's first perpetration, whichever took place first.
And for that or those experience/s, the following are also met:
- The subject was physically separated from someone meeting the criteria for primary carer
- The separation lasted for one month or more
- Ensure that the guidelines on inferring duration of both contact with the carer and separation from the carer have been adhered to.
Protective Factors

Protective Factors:

Continuity of Care 339
Non-abusive Primary Carers 340
Treatment History 342
Good Relationship with an adult 344
Good Sibling relationship 345
Good Peer relationship 347
Responses to Disclosure 348
Continuity of Care

**Questions**

1. **What was the longest period of time the subject was cared for by the same carer?**

   The coder should then enter the start date and end date of this period as accurately as the extracted information allows. Before doing so however, the following should be considered:

   - The time period is likely to span more than one care unit.
   - There should not be any breaks in the care experienced by the subject from this carer. If a break has occurred, it should not be any longer than one month. If it is longer than a month, the start of the break marks the end of one period of care and the end of the break marks the start of the next.
   - The perpetration status of the carer should not be considered in this particular coding.
   - No time period should go beyond the subject’s sixteenth birthday, or date of first perpetration, whichever date comes first.

2. **a) What was the total number of care units experienced by the subject prior to his sixth birthday?**

   **b) What was the total number of care units experienced by the subject prior to his twelfth birthday?**

   Before answering these questions, the coder should consider the following:

   - Refer to the definition of ‘Care unit’ in the introduction to this manual.
   - Include units that are at least one month long that have not ended by the cut-off age, e.g. include a unit that started at least a month before the subject’s sixth birthday and was still in place beyond that age.

   The coder should merely enter the integer number of care units that the subject experienced in the time specified.

3. **What was the total number of years that the subject spent in non-abusive foster care?**

   The coder is required to make a tally of the durations of the care units in which the subject was placed with non-abusive foster parents. Having added these time periods up, round the total duration down to the nearest month.

   Before coding, the coder should consider the following:

   - Ensure that the subject was not exposed to any form of abuse (i.e. sexual, physical, intrafamilial physical, rejection, neglect FTP or neglect LOS) perpetrated by the foster parents, whilst he was living with these same foster parents.
   - The subject must be placed with foster parents under the direction of social services, though not necessarily by social services. Do not count private foster care placements whose start and end dates predate social services involvement, even if there is no evidence that they were abusive. If a private placement started before social services involvement, but was still in place and allowed to continue by social services when their involvement did begin, include the duration of this care unit from its commencement. The thinking behind this is that we want to be sure that the foster carers were suitable people for this role and would not have provided dysfunctional care.
Non-abusive Primary Carers

Definitions

Definitions of Main caregiver and Primary Carer are given in the introductory section of this manual, under the heading ‘Stage 4: Construction of a care table’. These are very important definitions. Please refer to them before coding this section.

Non-abusive Primary Carer

An individual who qualified as a primary carer (see definition in the introductory section) and who did not perpetrate any abusive behaviour towards the subject. This relates only to times prior to the subject’s sixteenth birthday or, if it came sooner, before the date of his first perpetration. The primary carer must therefore not have perpetrated sexual abuse, physical abuse, neglect (failure to provide or lack of supervision) or any form of rejection of the subject, nor must they have perpetrated intrafamilial physical abuse when living with the subject (see definitions in relevant chapters above).

If there is a clear statement by a mental health professional or social worker that only one primary carer (from a care unit with two) perpetrated a particular type of abuse, the other primary carer will be assumed not to be a perpetrator of that abuse, unless there is additional evidence to implicate him/her. In the event of disagreement between reports, take the word of the individual who is highest in the authority table as correct. If they are at the same level, assume both main carers are responsible.

Sexually non-abusive primary carer

An individual who qualified as a primary carer (see definition in the introductory section) and who did not perpetrate sexually abusive behaviour (see definition in CSA chapter) towards the subject or anyone else at any time prior to the subject’s sixteenth birthday or the date of his first perpetration. This includes when they were not primary carers to the subject.

Questions

1. How many male non abusive primary carers (NAPCs) were present in the subject’s life during the following three time periods?
   - 6 months - 6 yrs:
   - 6 months - 12 yrs:
   - 6 months - 16 yrs:

2. What was the duration in years and months of the longest lasting male NAPC?

The same two questions will be asked separately for female non-abusive primary carers.

3. How many male sexually non abusive primary carers (SNAPCs) were present in the subject’s life during the following three time periods?
   - 6 months - 6 yrs:
   - 6 months - 12 yrs:
   - 6 months - 16 yrs:

4. What was the duration in years and months of the longest lasting male SNAPC?

The same two questions will be asked separately for female non-abusive primary carers.
Clarifications

To qualify as a Non-abusive primary carer in one of the time periods the following must apply:

- the individual must have qualified as a primary carer (see definition in introduction) at some time during that time period
- the individual must not have abused the subject sexually, physically, nor must they have rejected or neglected the subject in any way, even outside of the time when they were a primary carer. In addition they must not have perpetrated intrafamilial physical abuse whilst living with the subject.

It is not necessary for the NAPC to have cared for the subject for the whole of the time period being asked about. Note: the minimum duration of care must be 1 year as that is necessary to qualify as a primary carer.

To qualify as a Sexually non-abusive primary carer in one of the time periods the following must apply:

- the individual must have qualified as a primary carer (see definition in introduction) at some time during that time period
- the individual must not have perpetrated sexual abuse (see definition in CSA chapter) either against the subject or anyone else within that time period, even outside of the time when they were a primary carer.

It is not necessary for the SNAPC to have cared for the subject for the whole of the time period being asked about. Note: the minimum duration of care must be 1 year as that is necessary to qualify as a primary carer.
Treatment History

**Definition**

T**reatment**

Treatment consists of any contact with mental health professionals. The treatment does not necessarily have to be in connection with sexual abuse. It does not refer to treatment in connection solely with physical health. However, there must be evidence that the subject actually received treatment (i.e. a report of the meeting). An appointment letter will not suffice as evidence of treatment history.

**Dichotomous question: Did the subject receive any psychotherapeutic/psychiatric treatment?**

For a ‘yes’ to be coded, consider the following points:

- There must be a record of at least one meeting taking place between the subject and a psychological health professional (psychiatrist, psychiatric social worker, psychotherapist, clinical psychologist). A quote from a letter inviting the subject to such a meeting is unacceptable.
- The meeting may or may not have been about the experience of sexual abuse, and could merely constitute a one-off assessment, rather than a course of treatment. However the meeting should not have been solely in connection with a physical condition.

**Additional question: Did the subject receive a ‘course’ of psychotherapeutic treatment?**

For a ‘yes’ to be coded, consider the following points:

- There must be evidence that the subject attended one or more sessions of a specified course of treatment which was offered after their experience of sexual abuse had come to light. This may have been with professionals at GOSH or another hospital/clinic or with a social worker. Often a course of treatment took the form of a series of ten sessions of group therapy with a number of other sexual abuse victims. At other times the subject may have been seen individually by a psychotherapist or psychiatrist.
- There must be a record of at least one meeting taking place between the subject and a psychological health professional (psychiatrist, psychiatric social worker, psychotherapist, clinical psychologist). A quote from a letter inviting the subject to such a meeting is unacceptable.
- Do not code ‘yes’ if the meeting merely constituted a one-off assessment or a follow-up assessment. Such assessments were often offered immediately following referral to GOSH and were to establish whether the hospital was willing to offer treatment or not. They may also have occurred if a clinician had been asked to write a report for court or social services. However such assessments do not constitute a course of treatment for the sake of this coding. It must be clear that a course of treatment was offered, or a series of sessions with a social worker which were aimed at helping the subject deal with his victimisation. In summary, the coder must be able to deduce that there was therapeutic input to the subject rather than just an assessment of the situation at the time.
Trawling instructions

Extract any information that refers to the subject having been treated by any mental health professionals, in any capacity.

For ease of coding, please pay particular attention to the following points:
Type of treatment, the institution providing the treatment, frequency, duration and the reason for treatment.
Good Relationship with an adult

**Definitions**

**Adult**
An individual who is at least 18 years of age. This should be clear from statements or deducible from the information given. However, if it is not clear that the individual is a peer (see definition in 'Good peer relationship') of the subject, assume they are an adult.

**'Good' relationship**
For the purpose of this study, a 'good' relationship is defined as one in which the adult is generally supportive and nurturing of the subject and in which the emotional needs of the subject are consistently met by the adult. Of course, it is rare that so much detail is written about such a relationship. It is enough for the relationship to be referred to as 'good' or 'close' or any derivative or synonym of these words. There must not be any evidence that the subject experienced any abuse (sexual, physical, witnessed intrafamilial physical, rejection or neglect) from this individual at any time prior to the subject's sixteenth birthday or date of first perpetration.

The indication of positive affect from the subject towards the adult is not, on its own, indicative of a good relationship, e.g. 'the subject stated that he liked his uncle' would not be enough for a positive coding. There must also either be some indication that the relationship is one that is generally beneficial to the subject's welfare, or some reference to it as being 'good' or 'close', etc. For example, the other party should not be leading the subject into criminal activity.

It is permissible for the subject to have a 'good' relationship with more than one adult.

**Dichotomous question: Did the subject have at least one good relationship with an adult?**

Prior to coding, consider the following points:

- A relationship with anyone 18 years or over will constitute a relationship with an adult.
- Refer to the definition of a 'Good relationship with an adult' above.
- The subject must be under 16 years of age for a coding of 'yes' to be possible.
- There must have been no abusive element to the relationship prior to the subject’s sixteenth birthday or date of first perpetration.

**Trawling instructions**

Extract any information from the files which indicates the names of all the adults with whom the subject was considered to have a 'good' relationship, as defined above. The adults' names should also be entered onto the people table.

In addition, extract any information that indicates the age of the subject at the beginning/ end of the relationship and the duration of the relationship. Duration is to be recorded in years and months.
Good Sibling Relationship

**Definitions**

**Sibling**

Anyone who in the files is referred to as, or who can be deduced to be, a ‘brother’, ‘sister’, ‘foster brother’, ‘foster sister’, step-brother’, ‘step-sister’ of the subject.

**‘Good’ relationship**

For the purpose of this study, a ‘good’ relationship with a sibling is defined as one in which the general tenor of the relationship is one of co-operation and friendship. Of course, it is rare that this information is recorded about such a relationship. Provided there are no references to frequent episodes of violence or pervasive conflict between the siblings, it is enough for the relationship to be referred to as ‘good’ or ‘close’ or any derivative or synonym of these words. It is unlikely that there is no conflict between two siblings, but the general tone of the relationship should be considered. There must not, however, be any evidence that the subject experienced any abuse (sexual or physical) from his sibling at any time prior to the subject’s sixteenth birthday or date of first perpetration.

The indication of positive affect from the subject towards the sibling is not, on its own, indicative of a good relationship, e.g. a statement that the subject likes his older brother. There must be evidence that this affection is reciprocated, e.g. a reference to the relationship as being positive. It is permissible for the subject to have a ‘good’ relationship with more than one sibling, although only one such relationship is needed for ‘yes’ to be coded to the dichotomous question below.

**Dichotomous Question: Did the subject have a good relationship with at least one of his siblings?**

The coder is required to answer ‘yes’, ‘no’ or ‘insufficient information’ to this question. Before coding, consider the following:

- Refer to the examples below of the type of information that can be taken to indicate the quality of the relationship between the subject and his siblings. The list is not exhaustive. The presence of one or more positive features of a sibling relationship will allow a coding of ‘yes’, provided the qualifications in the definition of ‘good relationship’ given above are adhered to.
- The quote relating to this relationship must have been recorded before the subject’s 16th birthday.
- If there is a quote indicating that a particular relationship was good, as well as one stating that this same relationship had later become poor, do not record this as a good relationship. Refer to the section entitled ‘Poor sibling relationship’ for the relevant criteria and definitions.
- The absence of abuse within a sibling relationship is not sufficient to allow a coding of ‘yes’.
- If in doubt about the coding, code as ‘insufficient information’ or ‘no’.

**Quality of relationship**

The following are examples of the type of information that can be taken to indicate the quality of the relationship between the subject and his siblings. The list is not exhaustive. The information can be reported by the subject, sibling or any other person:

**Companionship**: how much free time they spend together; how much they play around and have fun together; how often they do enjoyable things together.
Conflict: how often they get mad or upset with each other; how much they disagree and quarrel; how much they argue.

Instrumental aid: how much one teaches the other to do things he does not know; how much one helps the other figure out or fix things; how much they help each other.

Satisfaction: how satisfied they are with the relationship; how happy they are with the relationship; how good the relationship is.

Intimacy: how much they tell each other things; how much they share secrets and private feelings with each other; how much they tell each other things they do not want others to know.

Nurturance: how much one helps the other do things that the other cannot do by him/herself; how much they protect and look out for each other; how much they take care of each other.

Affection: how much they like or love each other; how much they really care about each other; how much they have a strong feeling of affection for each other.

Punishment: how much they punish each other; how much they discipline each other for disobeying; how much they scold each other.

Admiration: how much they admire and respect each other; how much they treat each other like the other is good at many things; how much they approve of what each other does.

Relative power: who tells the other what to do most often; who tends to be the boss; who tends to take charge.

Reliable alliance: how certain they are that the relationship will last no matter what; how sure they are that the relationship will last in spite of fights; how sure they are that the relationship will survive in years to come.
Good Peer Relationship

**Definitions**

**Peer group**

Individuals who are members of the same age group as the subject. This includes all other individuals who are under the age of eighteen at the time of the event in question. If it is not clear or deducible that the individual is a peer, assume that they are an adult.

**Good peer relationship**

Any dyadic relationship with a peer described as good, close, or any derivative or synonym of these words. Includes terms such as best friend. Reference to ‘friends’ or ‘the subject is getting on well with...’ alone is not sufficient for a good peer relationship to be coded. There must be additional information that a relationship was in some way close. There must not be any evidence that the subject experienced any abuse (sexual, physical or rejection) from the peer at any time.

The indication of positive affect from the subject towards the peer is not, on its own, indicative of a good relationship. There must be evidence that this affection is reciprocated, e.g. a reference to the relationship as being positive. It is permissible for the subject to have a ‘good’ relationship with more than one peer, although one such relationship is enough for a coding of ‘yes’ to be made to the global question below.

If there is doubt whether the relationship meets the criteria for close, then the criteria is not met.

**Peer rejection/social isolation**

If peer rejection or social isolation are indicated by quotes from the file, this would suggest that the subject’s relationships with his peers were not good. Peer rejection would be indicated by statements that refer to behaviours performed by the subject’s peer group that specifically excluded him from their social network. Examples of exclusion behaviour by the peers include psychological bullying by peers, reports that the subject was picked on, or reports of the subject’s class at school refusing to associate or play with him. Examples of social isolation include statements such as ‘He has difficulties with own peer group’, ‘He finds it difficult to make friends’, ‘He does not have a peer group that he hangs out with’ and ‘He finds age appropriate relationships difficult to achieve’.

If the subject experienced peer rejection from an individual or group of individuals previously or subsequently referred to as a good friend(s), this relationship should not be coded as ‘good’.

**Global Question: Did the subject have a good relationship with at least one of his peers?**

Before coding, consider the following:

- Do not code ‘yes’ if the appropriateness of the relationship is called into question in a quote, e.g. the ‘good friendships’ are with individuals who are much younger/older than the subject, or with people who bully him, or other such indicators of ‘non-friendship’.
- The quote relating to this relationship must have been recorded before the subject’s 16th birthday.
- If there is a quote indicating that a particular relationship was good, as well as one(s) indicating that this same relationship had later become poor, do not record this as a good relationship. Refer to the definition above of ‘Peer rejection/social isolation’ for the relevant criteria.
- The absence of abuse within a peer relationship is not sufficient to allow a coding of ‘yes’.
- If in doubt about the coding, code as ‘insufficient information’ or ‘no’.
Responses to Disclosure

This factor takes into account the following:

- response of non-abusing main carer
- response of initial confidant
- response of family
- response of the perpetrator.

The point of disclosure is slightly different for each of the above individuals, and hence this is defined at the top of each section.

<table>
<thead>
<tr>
<th>Definitions</th>
</tr>
</thead>
</table>

**Response**

The behaviour of the main carer after the point of disclosure, in terms of her/his belief in, or attempts to stop the abuse or lessen its impact, will be regarded as his/her response to disclosure. It is hypothesised that a positive response would have a protective effect, and thus only responses that are appropriately supportive to the subject whose sexual abuse has just been disclosed should be recorded and coded in this section. Thus there will be no overlap with other risk factors.

**Non-Abusing Main Carer**

An individual who qualified as a main carer (see definition in the introductory section) and who did not perpetrate any abusive behaviour towards the subject. This relates only to times prior to the subject's sixteenth birthday or, if it came sooner, before the date of his first perpetration. The main carer must therefore not have perpetrated sexual abuse, physical abuse, neglect (failure to provide or lack of supervision) or any form of rejection of the subject, nor must they have perpetrated intrafamilial physical abuse when living with the subject (see definitions in relevant chapters above).

**Initial confidant**

This refers to the first person to whom the subject disclosed his sexual victimisation. This does not include the non-abusing main carer.

**Family member**

Family members are defined, for the sake of this question only, as those individuals who are defined in familial terms, i.e. everyone who scores 2 or above on the 'closeness to perpetrator' rating, apart from authority figures and caregivers who have been living with the subject for a month or more. The latter group will be covered in the first of these four questions on responses.

**Point of disclosure to a main carer**

Disclosure to a main carer (as defined in the introduction) occurs the moment that the subject knows the carer is aware the abuse has taken place. An example might be a quote stating that the carer walked in on the abuse. Remember that a non-abusing main carer could be someone who observes the abuse but has no physical contact with the subject.

In the vast majority of cases it will be clear whether or not the non-abusing main carer knew about the abuse before it was disclosed to social services or the police. If it is neither clear, nor deducible from the information, assume that (s)he did not know, and take the point of disclosure to be when professionals were first informed.
Point of disclosure to initial confidant

The trawler will only be aware of the identity of the initial confidant if (s)he is explicitly mentioned as such. The subject would not be disclosing to someone who he knew was already aware of the abuse. Thus the point of disclosure will be the moment the subject tells the confidant about the abuse.

Point of disclosure to family

This is the point at which it is widely known within the family that the abuse of the subject is going on, or has gone on. This may be as a result of the subject’s disclosure, someone else’s disclosure or their own discovery. With respect to the family, we are interested in individuals other than non abusing main carers and the principle players in the abuse. For example, the responses of siblings, grandparents, aunts and uncles would be noted in this case.

Belief of disclosure

Belief about the disclosure would be indicated by a reported action, by one or more ‘responders’ (e.g. main carers, initial confidant, family), to prevent further abusive events from happening to the subject, or to minimise their effects. Alternatively there may simply be a report that a particular ‘responder’ believed the subject in his disclosure.

Dichotomous question: Did the subject experience a positive response to his disclosure?

Tick yes, if the criteria for at least one of the following four questions is met.

1. Was there evidence that at least one non abusing main carer either believed the disclosure about the sexual abuse at the time of the disclosure, or acted in some way to prevent it continuing?

For a yes to be coded, the following must be considered:

- Refer to the definition of a main carer.
- This applies to the responses of individuals who were the main carers at the time of the disclosure, a maximum of two people. If it is clear that either of these people believed or acted, code as a ‘yes’.
- Refer also to the distinction made between a non abusing main carer (NAMC) and a perpetrator.
- Belief can be indicated only by an explicit statement that the individual believed the disclosure, but this statement need not be made by the main carer themselves.
- If a c.s.a. professional (e.g. psychiatrist, social worker) states that they don’t think the NAMC did believe a disclosure, either because of their inaction or for any other reason, when it has been stated that they did believe, assume for the sake of this question that the NAMC did not believe the disclosure.
- The timing of the belief statement is not relevant in this case, i.e. there can be initial disbelief. However, the main carer must not have subsequently changed her/ his mind, i.e. the belief must be permanent.
- The belief must be unequivocal. There must be no qualifying statements, minimisation or lingering doubt.
- An action to prevent abuse from continuing would include not allowing access with the perpetrator.
- The attempt to prevent further abuse may not be successful. Code this as a ‘yes’ even so.
- If there are no statements or actions indicating belief or disbelief the question must be coded as ‘Insufficient information’.

2. Was there evidence that the initial confidant believed the disclosure or acted to prevent further sexual abuse?

The following must be considered prior to coding:

- The initial confidant is defined as the first person to whom the subject disclosed.
- If the initial confidant is also a main carer, this question is to be coded ‘Not applicable’. The previous question will pick up their response.
- The belief must be immediate. If there is initial disbelief, this question is to be coded ‘no’.

356
• The initial confidant must not have subsequently changed her/his mind, i.e. the belief must be permanent.
• Belief can be indicated by an explicit statement that the individual believed the disclosure, or that they made an attempt to stop the abuse. Any action to prevent it from continuing can be taken to indicate belief, unless it is explicitly stated that the person did not believe the disclosure.
• If there are no statements or actions indicating belief or disbelief, the question must be coded as ‘Insufficient information’.

3. Was there evidence that the subject’s family believed the disclosure about the sexual abuse?

The following must be considered prior to coding:

• Family members are defined, for the sake of this question only, as those individuals who are defined in familial terms, i.e. everyone who scores 2 or above on the ‘closeness to perpetrator’ rating, apart from authority figures and caregivers who have been living with the subject for a month or more. The latter group will be covered in the first of these four questions on responses.
• Belief is extremely rare within the families of maltreated individuals. Therefore, if even one family member, who was not the initial confidant nor a primary carer, believed the disclosure, code this as a ‘yes’.
• Belief can be indicated by an explicit statement that the individual believed the disclosure, or that they made an attempt to stop the abuse. Any action to prevent it from continuing can be taken to indicate belief, unless it is explicitly stated that the person did not believe the disclosure.
• The timing of the belief statement is not relevant in this case, i.e. there can be initial disbelief. However, the primary carer must not have subsequently changed her/his mind, i.e. the belief must be permanent.
• The belief must be unequivocal. There must be no qualifying statements, minimisation or lingering doubt.
• If there are no statements or actions indicating belief or disbelief, the question must be coded as ‘Insufficient information’.

4. Did the perpetrator admit to the abuse?

The following must be considered prior to coding:

• The timing of the admittance is not important in this case, i.e. the perpetrator may initially deny the abuse. Again, this is because the perpetrator rarely admits to his offences and therefore we want to pick up any admittance that takes place. However, the perpetrator must not have subsequently changed his/her mind, i.e. the admittance must be permanent.
• The admittance must be unequivocal. There must be no qualifying statements, minimisation or lingering doubt.
• If there are no statements or actions indicating admittance or denial, the question must be coded as ‘Insufficient information’.

Additional question: Was at least one person who perpetrated sexual abuse against the subject convicted in court for this behaviour?

Tick ‘yes’ if there is evidence of at least one such conviction.

The following must be considered prior to coding:

• The conviction must have been recorded prior to the subject’s sixteenth birthday or their first perpetration
• The conviction must be for offences which include at least one of a sexually abusive nature relating to the subject.
• There must be a conviction for offences perpetrated against the subject. It is possible that convictions for offences against other individuals were included in the court report but these should not affect the coding.
Trawling instructions

Record any statements that explicitly or implicitly identify the relationship between the subject and the non-abusing main carer.

Point of intervention by Non abusing main carer:

Make a record of any clear statement, or of any statements from which it can be logically deduced, that the intervening main carer acted either immediately upon disclosure of the abuse or somewhat later, to prevent further abuse from happening to the subject.

If the individual is coerced into being present, whether active or passive, they cannot be held fully responsible for their actions. Make a record of any statements which indicate that their presence was coerced and any means by which they may have attempted to lessen the impact on the child.

Response of initial confidant:

- Record any statements indicating the response of this person in terms of whether or not they believed that abuse occurred.
- Record all statements which indicate whether or not this person acted to prevent the abuse from continuing.

Response of family:

- Record any statements which indicate the response of the family in terms of whether or not they believed that abuse occurred. Record quotes that state or suggest that even one family member believed the disclosure.
- Record all statements which indicate whether or not at least one member of the family acted to prevent the abuse from continuing.

Response of Perpetrator:

- Record any statements which indicate that the accused individual admitted to perpetrating the abuse, either when first confronted about it, or subsequently.
- Record any statements which indicate that the accused individual denied perpetrating the abuse, either when first confronted about it, or subsequently.
Appendix 3

Protective Factors Coding Sheet
**Protective factors:**

**Sexually Non-abusive primary carer:**

**Please note that the codings on this page refer to non abusive primary carers, who have not perpetrated sexually abusive behaviour towards the subject.**

They may however have perpetrated other forms of abusive behaviour [physical, neglect, emotional, or have perpetrated intrafamilial physical abuse] towards the subject or when living with the subject.

<table>
<thead>
<tr>
<th>Sexually Non-abusive primary carers [SNAPCs]; Males only:</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many Male SNAPCs were present during the ages:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months to 6 years: (Enter a number)</td>
<td>SNAPM 6</td>
<td></td>
</tr>
<tr>
<td>6 months to 12 years: (Enter a number)</td>
<td>SNAPM 12</td>
<td></td>
</tr>
<tr>
<td>6 months to 16 years: (Enter a number)</td>
<td>SNAPM 16</td>
<td></td>
</tr>
<tr>
<td>Longest time subject continuously cared for by a male SNAPC: (decimal years and months) [no separation &gt; month] note that may span more than one unit.</td>
<td>SNAPM DU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sexually Non-abusive primary carers [SNAPCs]; Females only:</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many female SNAPCs were present during the ages:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months to 6 years: (Enter a number)</td>
<td>SNAPF 6</td>
<td></td>
</tr>
<tr>
<td>6 months to 12 years: (Enter a number)</td>
<td>SNAPF 12</td>
<td></td>
</tr>
<tr>
<td>6 months to 16 years: (Enter a number)</td>
<td>SNAPF 16</td>
<td></td>
</tr>
<tr>
<td>Longest time subject continuously cared for by a female SNAPC: (decimal years and months) [no separation &gt; month] note that may span more than one unit.</td>
<td>SNAPF DU</td>
<td></td>
</tr>
</tbody>
</table>

**Treatment history:**

<table>
<thead>
<tr>
<th>Did the subject receive any psychotherapeutic/psychiatric treatment? (No = 0; Yes = 1)</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TH ANY</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did the subject receive a course of psychotherapeutic treatment? (No = 0; Yes = 1)</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TH C</td>
<td></td>
</tr>
</tbody>
</table>
## Protective factors:

### Continuity of care:

<table>
<thead>
<tr>
<th>Description</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of years the subject spent in non-abusive foster care (decimal years and months)</td>
<td>CARE FC</td>
<td></td>
</tr>
<tr>
<td>The questions below are to be answered on the basis that any perpetrator status of any carers is irrelevant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longest period of time the subject was cared for by the same carer (decimal years and months)</td>
<td>CARE LO</td>
<td></td>
</tr>
<tr>
<td>Total number of care units prior to the subject's 6th birthday (Enter a number)</td>
<td>CARE 6</td>
<td></td>
</tr>
<tr>
<td>Total number of care units prior to the subject's 12th birthday (Enter a number)</td>
<td>CARE 12</td>
<td></td>
</tr>
</tbody>
</table>

### Non-abusive primary carer:

#### Non-abusive primary carers [NAPCs]: Males only:

This refers to NAPCs who have not perpetrated any form of abuse [sexual, physical, neglect, emotional, nor intrafamilial physical abuse] towards the subject, or when living with the subject.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many Male NAPCs were present during the ages:</td>
<td>/ 19</td>
<td>/ 19</td>
</tr>
<tr>
<td>6 months to 6 years: (Enter a number)</td>
<td>NAPCM 6</td>
<td></td>
</tr>
<tr>
<td>6 months to 12 years: (Enter a number)</td>
<td>NAPCM 12</td>
<td></td>
</tr>
<tr>
<td>6 months to 16 years: (Enter a number)</td>
<td>NAPCM 16</td>
<td></td>
</tr>
<tr>
<td>Longest time subject continuously cared for by a male NAPC: (decimal years and months)</td>
<td>NAPCM DU</td>
<td></td>
</tr>
</tbody>
</table>

#### Non-abusive primary carers [NAPCs]: Females only:

This refers to NAPCs who have not perpetrated any form of abuse [sexual, physical, neglect, emotional, nor intrafamilial physical abuse] towards the subject, or when living with the subject.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many female NAPCs were present during the ages:</td>
<td>/ 19</td>
<td>/ 19</td>
</tr>
<tr>
<td>6 months to 6 years: (Enter a number)</td>
<td>NAPCF 6</td>
<td></td>
</tr>
<tr>
<td>6 months to 12 years: (Enter a number)</td>
<td>NAPCF 12</td>
<td></td>
</tr>
<tr>
<td>6 months to 16 years: (Enter a number)</td>
<td>NAPCF 16</td>
<td></td>
</tr>
<tr>
<td>Longest time subject continuously cared for by a female NAPC: (decimal years and months)</td>
<td>NAPF DU</td>
<td></td>
</tr>
<tr>
<td>Good relationship with adult:</td>
<td>Pre random age/ perp</td>
<td>Pre 16</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Did the subject experience a good relationship with an adult? (No = 0; Yes = 1)</td>
<td>GRAD DI</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Good sibling relationship:</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the subject experience a good relationship with a sibling? (No = 0; Yes = 1)</td>
<td>SIB DI</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Good relationship with peer:</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the subject experience a good relationship with a peer? (No = 0; Yes = 1)</td>
<td>PEER DI</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response to disclosure:</th>
<th>Pre random age/ perp</th>
<th>Pre 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was there evidence that at least one sexually non abusing primary carer either believed the disclosure about the sexual abuse or acted in some way to prevent it continuing, or to provide appropriate support? (No = 0; Yes = 1)</td>
<td>RNAP DI</td>
<td></td>
</tr>
<tr>
<td>Was at least one person who perpetrated sexual abuse against the subject convicted in court for this behaviour? (No = 0; Yes = 1)</td>
<td>RCON DI</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4

GOSH Research Ethics Committee approval letter
Dear Professor Skuse

95BS10  A prospective study of the onset of sexually abusive behaviour in boys who were sexually abused in early childhood: validation of risk index.

Notification of ethical approval

The above research has been given ethical approval after review by the Great Ormond Street Hospital for Sick Children NHS Trust / Institute of Child Health Research Ethics Committee subject to the following conditions.

1. Your research must commence within twelve months of the date of this letter and ethical approval is given for a period of 36 months from the commencement of the project. If you wish to start the research more than twelve months from the date of this letter or extend the duration of your approval you should seek Chairman’s approval.

2. You must seek Chairman’s approval for of proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature, i.e. using the same procedure(s) or medicinal product(s). Each research project is reviewed separately and if there are significant changes to the research protocol, for example in response to a grant giving bodies requirements you should seek confirmation of continued ethical approval.

3. It is your responsibility to notify the Committee immediately of any information which would raise questions about the safety and continued conduct of the research.

4. Specific conditions pertaining to the approval of this project are:

- That material arising from this research will be published under the auspices of the Institute of Child Health.
Yours sincerely

Anna Jenkins
Secretary to the Research Ethics Committee

cc Mark Richards
Project Team Leader
Appendix 5

Office for National Statistics
ethical approval letter
Dear Professor Skuse

THE ONSET OF SEXUALLY ABUSIVE BEHAVIOUR IN BOYS

Dr Fox has now given his approval for your study to proceed. This approval will be valid for 18 months. If you are unlikely to submit the work to NHSCR within this time please contact me.

NHSCR have provided an estimate to do the work. It is estimated that 62 per cent of the cases will automatically match, leaving 38 per cent requiring operator intervention. Assuming the data is received on disc the estimate is approximately £757.60 plus VAT. If the work is submitted on paper the cost will be approximately £897.85 plus VAT.

The estimate does not cover cases which require manual tracing, or any coding. The rates which will apply are those applicable in the financial year when the work is carried out, not the year in which the study is accepted. Any additions to the study, or changes to it may be subject to additional charges. On completion of flagging, future events will be charged annually.

Please let me know if you accept the estimate and wish to go ahead with the work.

Please complete and sign the attached Confidentiality Declaration which sets out the conditions under which OPCS can release data. One copy should be returned to me, the other is for you to keep. I need to receive one signed copy before any data can be provided to you.

I am attaching the specification for submitting the information on disc. If you have any technical queries regarding the creation or format of your disc please contact our NHSCR staff at Southport, Lynne Aindow on 0151 471 4306 or Wendy Eldridge on 0151 471 4229. General enquiries about your study should be directed to Jackie Gallagher on 0151 471 4456. If you decide to use the paper listing you have already sent, then please let me know. There seem to be quite a few duplicates on this list.

Please contact Frank Edwards on 0151 471 4306, before submitting your information. He will allocate a unique Medical Research number for your study which must be included on your disc or listing.
Your disc or listing should then be sent to:
Research Section
NHS Central Register
Smedley Hydro
Trafalgar Road
Southport
Merseyside
PR8 2HH

Please contact me if you require any further information.

Yours sincerely

Mrs P A Riach
Medical Research Unit
Appendix 6

Association of Chief Police Officers Crime Committee letter
Dear Professor D. P. Farrington,

Sexual Abuse and Criminal Careers

Thank you for your letter on this subject dated 19th October 1995.

This is clearly an interesting and worthwhile piece of research. Tony Butler’s personal support is noted, you will be aware that he takes a lead in this subject area within Crime Committee.

In the circumstances I therefore have no problem, on behalf of Crime Committee, in supporting the research.

The question of access to case files is, of course, a matter for each Chief Constable. I would have no objections to you enclosing a copy of this letter when you write to them.

Yours sincerely,

HONORARY SECRETARY

Association of Chief Police Officers
CRIME COMMITTEE

Hon. Secretary: D. C. BLAKEY, Q.P.M., M.B.A.
Chief Constable:
West Mercia Constabulary, P.O. Box 55, Hindlip Hall, Worcester, WR3 8SP

Secretariat Telephone: 01527 583789 (Direct) or 01905 723000 Ext. 2701
Secretariat Facsimile: 01905 458587

ACPO/CRIME/6/9

6th November 1995

DPF/FMB

Professor D. P. Farrington,
Institute of Criminology,
University of Cambridge,
7 West Road,
Cambridge. CB3 9DT
References


*Journal of Abnormal Psychology, 74*, 249-255.


distress among sexually abused preschool, school-age, and adolescent children.
*Hospital and Community Psychiatry*, 36, 503-508.


properties of the cognition scale. Unpublished doctoral thesis, Georgia State
University, Atlanta, GA.

review adjustment for potential response and measurement biases. *Child Abuse and
Neglect*, 21, 391-398.

Green, A. (1993). Child sexual abuse: immediate and long-term effects and
intervention. *Journal of the American Academy of Child and Adolescent Psychiatry*,
32, 890-902.

in the childhoods of pedophiles and hebephiles. *Journal of Forensic Sciences*, 38,
432-436.


the validation of a taxonomic system for classifying child molesters. *Journal of
Quantitative Criminology, 5*, 31-257.

released from a maximum security psychiatric institution. *Journal of Consulting and
Clinical Psychology, 59*, 381-386.

sexually abusive adolescents: Abuser and abuse characteristics. *Criminal Behaviour
and Mental Health, 5*, 187-208.

samples on psychological correlates of child sexual abuse. *Journal of Sex Research,
34*, 237-255.

assumed properties of child sexual abuse using college samples. *Psychological


Rohner, R. (1976). They love me, they love me not. New Haven, CT: HRAF Press.


