

**The Victimisation of Young People in the School and
Community Environments in England.**

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Abstract

Background

Important developments in the research literature exploring extrafamilial victimisation have been made in the USA. However, the comparable literature from the UK is underdeveloped, limiting our understanding of the prevalence and characteristics of extrafamilial victimisation in UK settings. In addition, greater understanding of the risk and protective factors for extrafamilial victimisation is needed to develop the most effective preventative interventions.

Objectives/ research questions

To address these gaps within the literature, two studies are presented within this thesis; one cross-sectional survey and one systematic literature review. The aims of study one were to provide a comprehensive assessment of all forms of extrafamilial victimisation with an English sample of young people, exploring; the prevalence, characteristics and location of extrafamilial victimisation, associated factors relating to routine activities, and the impact of extrafamilial victimisation on psychological well-being. Study two was designed to synthesise the research findings from longitudinal cohort studies regarding the predictive factors for all forms of extrafamilial victimisation, and to explore the quality of research in this area. This research was carried out within the theoretical context of the routine activities theory (RAT) and ecological systems theory. This provided a coherent structure to aid understanding of the processes involved in extrafamilial victimisation, as well as a way in which the different elements of the young person's ecology could be brought together to encourage exploration and to interpret the research findings.

Study design, participants and setting

Study one explores the extrafamilial victim experiences of 730 young people from eight mainstream secondary schools within one county in England. This incorporated one smaller case study of young people ($N = 214$) attending three secondary schools in one English town. Two pilot studies were carried out with two separate samples of young people ($N = 27$ & $N = 30$) in order to test, develop and refine the methods and procedures used in this study. The second study provided a narrative synthesis of the findings of 37 longitudinal (>1 year follow-up) cohort studies which investigated the risk factors for, and protective factors against, extrafamilial victimisation during childhood.

Main findings

The findings from study one revealed how widespread extrafamilial victimisation was amongst the young people taking part. Many of the characteristics of the young persons' activities within the community were found to increase their risk of extrafamilial victimisation, providing support for the RAT of extrafamilial victimisation. However, the characteristics of the young persons' journey home from school were not found to influence the prevalence of victimisation on this journey and some research findings based on the RAT of extrafamilial victimisation were not found to be significant predictors of community-based victimisation.

Geographical victimisation 'hotspots' were identified in the case study, which revealed how the geographical distribution of community-based victimisation was located within close proximity to the young person's school. Finally, different categories of extrafamilial victimisation were significant negative predictors of psychological well-being, as was past-year poly-victimisation and victimisation in

more than one location. Finally, social support was identified as a potential moderator of the relationship between victimisation and psychological well-being.

Findings from the systematic review (study two) highlighted a number of areas of bias within the cohort studies carried out in this area, particularly population bias and outcome (i.e., extrafamilial victimisation) measurement bias. A large number of risk factors ($N= 56$) were investigated in the included studies, the significance of which differed according to the extent of the extrafamilial victimisation explored and the definition of extrafamilial victimisation used. Less attention was given to protective factors ($N= 18$) within the included studies, yet a small number of individual characteristics were identified as potentially important predictors of peer victimisation. Crucially, interaction effects were identified between predictors (mediating and moderating variables) and between risk and protective factors. These findings highlight the complexity of the network of risk and protective factors for extrafamilial victimisation. They also reveal interaction effects between predictors operating across a number of different levels of the young person's ecology (e.g., individual predictors, environmental predictors, etc.).

Conclusion

The two studies presented within this thesis highlight the complex, multidimensional nature of extrafamilial victimisation. The thesis concludes by drawing upon the research findings and theories outlined within the literature to propose a new model of extrafamilial victimisation. This takes account of the different vulnerabilities and processes involved in victimisation, as well as recognising the reciprocal relationship between predictors and outcome. As such, recommendations for the development of prevention and intervention are outlined, as is the need for future research in this area.

Dedication

This thesis is dedicated entirely to you, Mum.
Without you, none of this would have been possible.

Thank you. x

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My first thanks go to all of the young people who made this project possible. Their openness and willingness to share their experiences has been touching, if not a little saddening at times. Thank you to the participating schools, teachers and parents who believed in this project and saw the value in taking part. A massive thank you goes to Warwickshire police, particularly George Stepney and Joanne Sheehy, who selflessly invested a large amount of their time and effort into this project. Without both, this project would not have been half as successful and for that I am truly grateful. Another huge thanks goes to Leicestershire and Leicester City Youth Offending Services, particularly Julie Fox and Tracy Green; both believed in the project from the beginning and your enthusiasm and support has fuelled my interest in this area and drove me to make the project as successful as possible.

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In the words of Nelson Mandela:

“It always seems impossible until it is done”

Table of Contents

Abstract	i
Dedication	iv
Acknowledgements	v
Table of Contents	vii
List of Figures	xvi
List of Tables	xvii
Chapter 1: The Historical Context, Definition and Theories of Extrafamilial Victimisation.....	
1	1
1.2. Introduction.....	1
1.3. Defining Childhood Victimisation.....	4
1.3.1. The definition of extrafamilial victimisation used for this research.	7
1.4. Historical Context of Extrafamilial Victimisation	9
1.5. Theories of Extrafamilial Victimisation	14
1.5.1. Routine activities theory	17
1.5.2. Ecological Systems Theory.....	20
Chapter 2. Literature review	24
2.1. Introduction.....	24
2.2. Prevalence of extrafamilial victimisation	24
2.2.1. Findings from the USA	26
2.2.2. Current Knowledge on the Extent of Extrafamilial Victimisation in the UK.....	27

2.2.3. Multiple Victimisation	35
2.3. Geographical location of extrafamilial victimisation.....	38
2.4. Extrafamilial victimisation ‘hotspots’	41
2.5. Understanding extrafamilial victimisation within the framework of the RAT	43
2.5.1. School-related routine activities associated with exposure to victimisation in school and community environments.	44
2.5.2. Extrafamilial victimisation on the journey to and from school	50
2.5.3. Routine activities within the community and exposure to community- based victimisation.....	52
2.6. Risk and Protective Factors for extrafamilial Victimisation.....	55
2.6.1. Risk factors	56
2.6.2. Protective factors.....	58
2.6.3. Mediating and moderating variables.....	58
2.7. Impact of Extrafamilial Victimisation on the Psychological Well-Being of Young People.....	60
2.7.1. Impact of different types and categories of extrafamilial victimisation.	62
2.7.2. Impact of poly-victimisation.....	62
2.7.3. Impact of victimisation experienced in multiple locations.	64
2.7.4. Resilience.....	65
2.8. Aims of the Thesis	68
Chapter 3. Study 1: methods.....	71

3.1. Chapter Overview: Introduction to Study One	71
3.2. Research objectives and hypotheses	71
3.3. Pilot studies 1 and 2: Development and Design of the Questionnaires, Mapping Exercise and Procedure	79
3.3.1. Pilot study 1.	79
3.3.2. Pilot study 2.	82
3.4. Measures Used in the Final Research	84
3.4.1. Demographic questionnaire.	85
3.4.2. Juvenile Victimization Questionnaire (JVQ).	89
3.4.3. Journey questionnaire.	99
3.4.4. Mapping exercise.	99
3.4.5. The Trauma Symptoms Checklist for Children-Alternate form (TSCC- A).	99
3.5. Sampling Strategy	104
3.5.1. Project collaboration and consultation.	104
3.5.2. Recruitment of schools.	104
3.5.3. Recruitment of young people.	106
3.5.4. Consent and assent.	107
3.5.5. Power Analysis.	111
3.6. Procedure	116
3.7. Ethical Concerns	119

3.8. Safeguarding Issues	119
3.9. Participants.....	120
3.10. Data analysis	121
3.10.1. Cleaning the data for missing variables and outliers.	121
3.10.2. Testing the data for parametric analysis.	122
3.10.3. Working with clustered data	124
3.10.4. Statistical analysis	126
Chapter 4. Study 1: results	135
4.1. Prevalence of extrafamilial victimisation.	135
4.2. Offender and victim characteristics.	138
4.3. Gender differences in the prevalence and characteristics of extrafamilial victimisation.....	144
4.4. Multiple and cumulative extrafamilial victimisation.	147
4.4.1. Poly-victimisation.	149
4.5. Location of extrafamilial victimisation.....	154
4.6. Timing and location of school-based victimisation.	156
4.7. Timing and location of community-based extrafamilial victimisation.	159
4.8. Geographical victimisation ‘hotspots’	163
4.9. Characteristics of the journey home from school.	170
4.10. Routine activities in relation to the school day	173
4.11. Routine activities and victimisation in the community.....	175

4.12. The impact of extrafamilial victimisation on psychological well-being....	178
4.12.1. Impact of different categories of victimisation.....	178
4.12.2. The impact of poly-victimisation.....	189
4.12.3. The impact of social support on the relationship between victimisation and psychological well-being.....	189
4.12.4. Impact of extrafamilial victimisation experienced in multiple locations.	191
Chapter 5. Study 1: Discussion.....	194
5.1. Prevalence.....	194
5.2. Multiple victimisation.....	200
5.3. Poly-victimisation.....	201
5.4. Location of extrafamilial victimisation.....	204
5.5. Geographical location of extrafamilial victimisation.....	207
5.6. Victimisation on the journey home from school.....	211
5.7. The influence of school-related routine activities and extrafamilial victimisation.....	214
9.8. The influence of routine activities in the community and community-based extrafamilial victimisation.....	216
5.9. Impact of extrafamilial victimisation on psychological well-being.....	219
5.9.1. Impact of different categories of victimisation.....	219
5.9.2. Impact of poly-victimisation.....	220

5.9.3. Social support as a moderator of the relationship between extrafamilial victimisation and psychological well-being.....	222
5.9.4. The impact of extrafamilial victimisation experienced in multiple locations.	224
5.10. Strengths and Limitations of Study one.....	228
5.11. Conclusions.....	235
Chapter 6: Study Two. Risk and Protective Factors for the Victimization of Young People in the School and Community Environments: A Systematic Review of Predictors and Interacting Variables.	236
6.1. Introduction to the review	236
6.2. Objectives of the review	236
6.3. Methods.....	237
6.3.1. Criteria for considering studies for this review.....	238
6.3.2. Search methods for identification of studies.....	238
6.3.3. Inclusion and exclusion criteria.	238
6.3.4. Electronic searches.....	241
6.3.5. Data collection and analysis.....	242
6.3.6. Assessment of risk of bias in included studies.....	243
6.3.7. Results of the search.	244
6.3.8. Data extraction.	247
6.3.9. Data synthesis.	248
6.4. Results.....	249

6.4.1. Description of studies.	249
6.4.2. Risk of bias in included studies.	280
6.4.3. Risk factors for extrafamilial victimisation	286
6.4.4. Protective Factors against extrafamilial victimisation.....	327
6.5. Discussion.	344
6.5.1. Risk Factors	344
6.5.2. Protective Factors.....	349
6.5.3. Overall completeness and applicability of evidence.....	351
6.5.4. Quality of the evidence.	353
6.5.5. Potential biases in the review process and limitations of the review....	355
6.5.6. Agreements and disagreements with other studies or reviews.	356
6.5.7. Theoretical understanding of the risk and protective factors for extrafamilial victimisation.	357
6.5.8. Implications for practice.	359
6.5.9. Implications for research.....	360
6.5.10. Conclusions.....	363
Chapter 7: Thesis Discussion and Conclusions	364
7.1. Chapter Overview	364
7.2. Overview and Contribution of the Main Research Findings	364
7.3. Support for the Theories of Extrafamilial Victimisation	365
7.3.1. Routine activities theory (RAT).....	365

7.3.2. Ecological theory.	367
7.3.3. Is it possible to achieve one holistic theory of extrafamilial victimisation?	369
7.3.4. A new model of extrafamilial victimisation.	373
7.4. Implications of the Research Findings for Practice	375
7.4.1. Preventing extrafamilial victimisation.	375
7.4.2. Addressing the impact of extrafamilial victimisation.	380
7.5. Directions for Future Research	381
7.6. Conclusion	385
References.....	386
Appendices.....	401
Appendix 1. Search terms used to identify the literature for the thesis.	401
Appendix 2. Help Booklet	403
Appendix 3. Safety Advice Booklet	408
Appendix 4. Demographic Questionnaire.....	413
Appendix 5. Extrafamilial Victimization Defined and Organised Into Modules, Categories, and Types	415
Appendix 6. Adapted Juvenile Victimization Questionnaire (JVQ).....	417
Appendix 7. Journey Questionnaire.....	432
Appendix 8. Mapping Exercise.....	434
Appendix 9. Instruction Sheet for the Mapping Exercise.....	435

Appendix 10. Victimisation Questions to Accompany Mapping Exercise	436
Appendix 11. TSCC-A.....	438
Appendix 12. Safeguarding Procedure	439
Appendix 13. Example of a Parent Information and Consent Letter.....	441
Appendix 14. Example of a Letter of Support From a School	443
Appendix 15. Young Person Consent Letter	444
Appendix 16. Intraclass correlation coefficients, variance inflation ratios and weighted means.....	445
Appendix 17. Safety and Victimisation Workshop Presentation Slides.....	453
Appendix 18. Table Displaying LT Victimisation Rates and Gender Differences for all 24 Types of Victimisation ($N= 710- 730$ due to missing data).	455
Appendix 19. Table Displaying PY Victimisation Rates and Gender Differences for all 24 Types of Victimisation ($N= 721- 730$ due to missing data).	457
Appendix 20: Inclusion Checklist.....	459
Appendix 21: Exclusion Criteria	460
Appendix 22: Electronic Database Search Strategy	462
Appendix 23: Grey Literature Search Strategy.....	466
Appendix 24: Quality Assessment Criteria for Cohort Studies.....	469
Appendix 25. Data Extraction Form	472

List of Figures

Chapter 1

Figure 1. Structure of childhood victimisation.....p3

Chapter 4

Figure 2. Perpetrator Gender for Victimization (categories and types) Against Young Females across the lifetime.....p144

Figure 3. Perpetrator Gender for Victimization (categories and types) Against Young Males across the lifetimep145

Figure 4. Map displaying the location of extrafamilial victimisation for participants attending all three secondary schools within one town.....p163

Figure 5. The interaction between anxiety and physical victimisation at different levels of the moderator (social support).....p189

Chapter 5

Figure 6. Flow-chart demonstrating study selection process.....p245

Chapter 6

Figure 7. Risk of bias across the 37 included studies.....p281

Figure 8. Risk of bias within each of the 37 included studies.....p282

Chapter 7

Figure 9. A new integrated model of extrafamilial victimisation which incorporates the cyclical relationships between the vulnerabilities.....p371

List of Tables

Chapter 1

Table 1. Theories of extrafamilial victimisationp15

Chapter 3

Table 2. Aims, Objectives and Hypotheses of Study Onep80

Table 3. Chi-square Analysis of the Differences Between Young People who Scored High Versus Low on Social Desirabilityp96

Table 4. Construct Validity of the Adapted JVQ: Correlation Between the Aggregate Lifetime Victimization Score and the Standardised TSCC-A Subscales ..p103

Table 5. Internal Consistency of the Adapted JVQ: Cronbach's Alpha (α) for the Full Victimization Questionnaire, Victimization Category Scores, and Victimization Module Scoresp105

Table 6. Brief Description of TSCC-A Clinical and Validity Subscalesp109

Table 7. Chi-square Analysis of the Differences between Young People Whose TSCC-A scores Were Invalid Due to Underresponding Versus Those Who Were Notp111

Table 8. Power calculations prior to, and after, adjustment for clustering within the data.....p123

Chapter 4

Table 9. Prevalence of Lifetime Childhood Extrafamilial Victimization by Total Exposure and Victimization Modules and Categories.....p135

Table 10. Prevalence of Past Year Childhood Extrafamilial Victimization by Total Exposure and Victimization Modules and Categories.....p136

Table 11. Relationship of the Perpetrator to the Victim (excluding dating violence) for lifetime victimisationp138

Table 12. Relationship of the Perpetrator to the victim for each type of victimisation under the category ‘Dating Violence’ over the lifetime	p139
Table 13. Number of Perpetrators Committing Different Types of Extrafamilial Victimization Against Young People for lifetime victimisation	p141
Table 14. Age of Perpetrator of Extrafamilial Victimization Against Young People for lifetime victimisation	p142
Table 15. Multiple extrafamilial victimisation across the LT and in the PY.....	p147
Table 16. Percentage of LT Poly-victims and LT Lower-level Victims (non-poly) Experiencing Serious Types of Victimization.....	p149
Table 17. Percentage of PY Poly-victims and PY Lower-level Victims (non-poly) Experiencing Serious Types of Victimization.....	p150
Table 18. Difference Between LT and PY Poly-victims and Lower-level PY and LT Victims (non-poly-victims)	p152
Table 19. Location of Extrafamilial Victimization Against Young People.....	p154
Table 20. Location of School-Based Direct Extrafamilial Victimization.....	p156
Table 21. Timing of School-Based Extrafamilial Victimization.....	p157
Table 22. Location of Community-Based Extrafamilial Victimization.....	p159
Table 23. Timing of Community-Based Extrafamilial Victimization.....	p161
Table 24. Way in Which Participants Travelled to School within Each of the Three Secondary Schools.....	p166
Table 25. Way in Which Participants Travelled Home from School Within Each of the Three Secondary Schools	p167
Table 26. Chi-Square Analysis Comparing Young People who Were Victimized on the Journey Home From School With Those who Were not Victimized on the Journey Home, Based on the Way They Travel Home From School.....	p170

Table 27. Chi-Square Analysis Comparing the Journeys of Young People who Walked or Cycled Home From School and Were Victimised on This Journey, to Those who Walked or Cycled and Were not Victimised on This Journey.....	p171
Table 28. Logistic regression analysis exploring the odds of being victimised in the community based on variables relating to the end of the school day.....	p173
Table 29. Social factors and activities in the community as predictors of the Aggregate Amount of Victimisation Experienced within the Community.....	p175
Table 30. Chi-Square Analysis Comparing Young People who Were Victimised in the Community With Those who Were not Victimised in the Community, on the Locations They go With Friends.....	p176
Table 31. Multiple hierarchical linear regression with school-fixed-effects on the intercept to measure Trauma Symptoms Predicted by Individual LT Victimisation Categories.....	p178
Table 32. Linear regression analysis exploring the ability of victimisation experienced in multiple locations to predict psychological well-being.....	p191
Table 33. Logistic regression analysis exploring the ability of victimisation experienced in multiple locations to predict dissociation.....	p192
Chapter 6	
Table 34. PECO	p239
Table 35. Characteristics of Included Studies Assessing Change in the Extent or Likelihood of Victimisation	p251
Table 36. Population Characteristics of Included Studies Assessing Change in the Extent or Likelihood of Extrafamilial Victimisation	p273

Table 37. Significant and non-significant risk factors for extrafamilial victimisation
as reported in the studies included in this review.....p287

Table 38. Significant and non-significant protective factors for extrafamilial
victimisation as reported in the studies included in this review.....p328

Table 39. Suggestions for improving the design of future research in this area...p361

Chapter 1: The Historical Context, Definition and Theories of Extrafamilial Victimisation

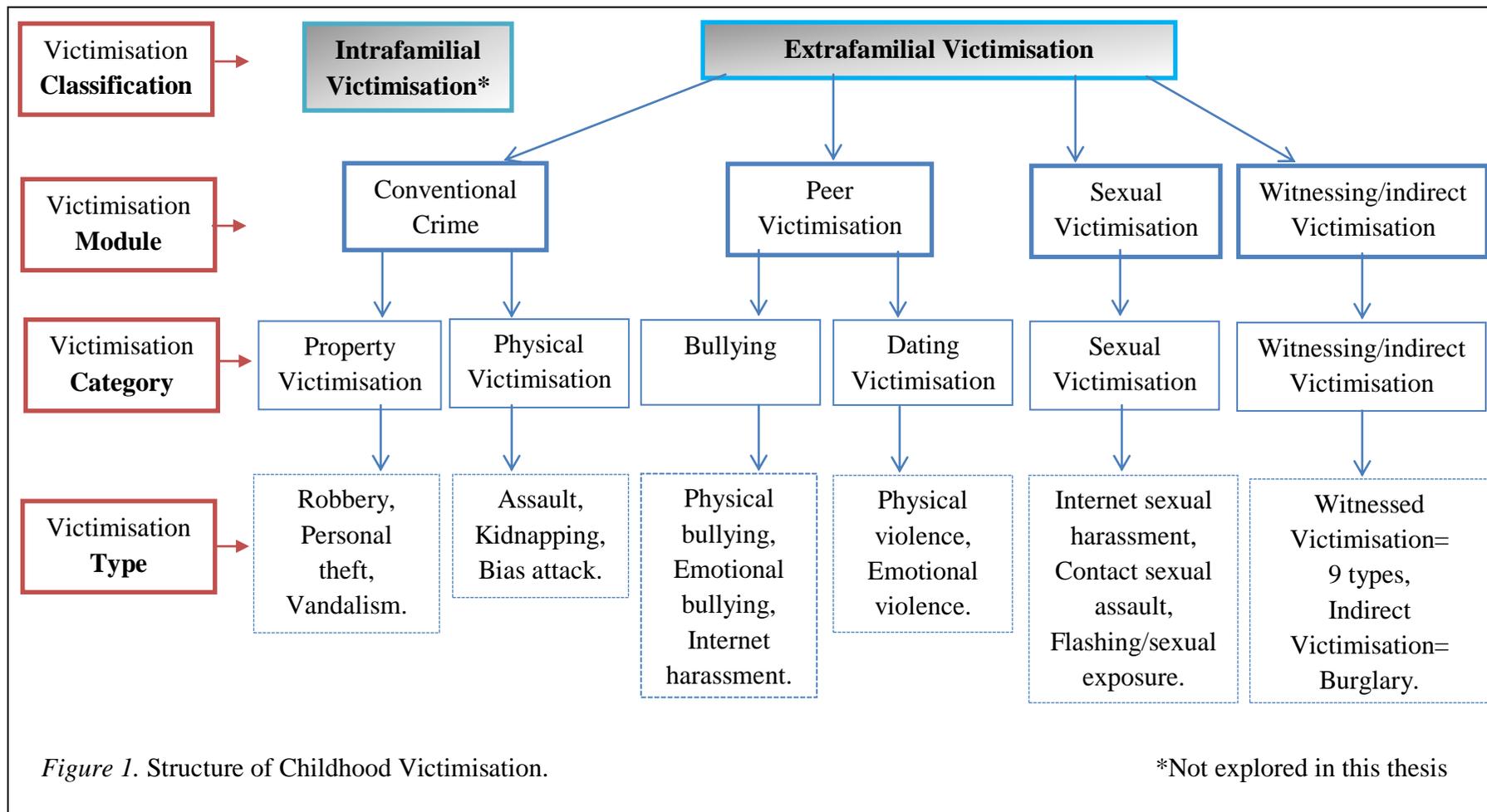
1.2. Introduction

Child victimisation is a complex, widespread problem that has long-lasting effects on victims and societies. The UN World Report on Violence Against Children (Pinheiro, 2006), and the 2007 UNICEF (United Nations Children's Fund) assessment of child well-being in 'rich' countries both express how vital it is to work towards dealing with, and eliminating, the issue of child victimisation. As such, they stress the importance of improving outcomes for children and gathering robust data concerning its extent and impact as a way of working towards these aims.

The focus of this thesis is on the victimisation of children and young people outside of the family (i.e., in the school and community environments), henceforth referred to as 'extrafamilial victimisation'. Figure 1 provides an overview of the categorical structure of extrafamilial victimisation referred to within this thesis. The definition of a child and young person for the current work is taken from The Oxford English Dictionary (<http://www.oed.com/>), whereby a child is defined as '*A young human being below the age of puberty or below the legal age of majority*', and a young person (within the United Kingdom (UK)) is defined as '*a person generally from 14 to 17 years of age*'. Therefore, any reference to a child or young person hereafter is based on these definitions.

This thesis provides a comprehensive overview of extrafamilial victimisation experienced by children and young people, explored within two large research studies. The first study investigates: (1) the prevalence, characteristics and location

of extrafamilial victimisation; (2) the geographical distribution of extrafamilial victimisation in the community; (3) whether the Routine Activities Theory (RAT) (Cohen & Felson, 1979) of extrafamilial victimisation can be supported by looking at victimisation in the school environment, in the community environment, and on the journey home from school; (4) and the impact of extrafamilial victimisation on psychological well-being. These issues are explored amongst a sample of young people in one county in England. Risk and protective factors for and against the extrafamilial victimisation of children and young people are then synthesised in a large systematic review of longitudinal cohort studies.



1.3. Defining Childhood Victimization

Using a clear definition of victimisation is crucial when conducting research in this area, yet there is great variation in its definition across studies. In part, this relates to the age of the children and young people being studied as well as differences in opinion as to what constitutes ‘normal’ and harmful childhood behaviour. Indeed, there appears to be a common assumption that violence between two young children is not as serious or detrimental as the same incident occurring between two adults or older adolescents (Finkelhor, 2008). There is no empirical evidence to support this notion however, and research provides evidence to the contrary (Finkelhor, Turner, & Ormrod, 2006; Ortega et al., 2012).

There are two main classifications of childhood victimisation; intrafamilial victimisation and extrafamilial victimisation. Intrafamilial victimisation, or ‘Child maltreatment’, is an umbrella term to describe family-based victimisation. This includes neglect, physical, sexual and emotional abuse, usually at the hands of a parent or caregiver. When dealing with these cases, there tends to be more focus on preserving the family network and less focus on prosecuting offenders (Finkelhor, 2008). Intrafamilial victimisation has received a lot of attention in the literature and has been the focus of the news media (e.g., Peachey, 2013) and many government initiatives over the years, such as the implementation of the ‘Family-Nurse Partnership’ in the UK (Barnes et al., 2011).

Extrafamilial victimisation is an umbrella term to describe victimisation occurring outside of the family and by perpetrators outside of the family network. This includes: acts of violence (often referred to as ‘community violence’); peer victimisation; criminal victimisation; dating violence; sexual victimisation; and indirect or witnessed victimisation. Although the response to extrafamilial

victimisation varies greatly, it is more likely to be handled by school personnel or the criminal justice system and less often becomes a child protection issue. Recent news reports on the systematic sexual abuse of young people by public figures ("Police record rise in sexual abuse claims after Jimmy Savile revelations," 2013), and the sexual exploitation of young females by groups of older men ("Abuse in Rochdale: brutality meets a blind eye," 2012), highlight two examples of young people's vulnerability outside of the family network. Although the research into extrafamilial victimisation has risen dramatically since the 1990s, it lags behind that on intrafamilial victimisation. Additionally, much of this research has been carried out in the United States of America (USA) and therefore our knowledge in the UK is limited, as is our understanding of the most effective prevention and intervention strategies.

Whilst two seemingly distinct classifications of childhood victimisation can be identified (intrafamilial versus extrafamilial), childhood victimisation is a complex issue with a significant amount of overlap between the two classifications. Young people are vulnerable to violence and abuse from family members, adults, and peers in the home, school and community, and there is a great deal of overlap between victimisation within these settings (Cyr et al., 2012; Cyr, McDuff, & Wright, 2006; Hong & Espelage, 2012). In addition, research findings have repeatedly shown that victimisation within one setting significantly increases the risk of victimisation within another (Finkelhor, Ormrod, Turner, & Holt, 2009; Hong & Espelage, 2012; Radford, Corral, Bradley, & Fisher, 2013). It is therefore imperative we understand about these occurrences, their individual characteristics, and the ways they interlink. On this basis, some researchers have made a conscious shift towards a more holistic exploration of childhood victimisation (Finkelhor,

2008; Radford et al., 2013). This involves focussing on the whole spectrum of childhood victimisation instead of fragmented sections (e.g., investigating intrafamilial victimisation only, investigating bullying only, etc.).

Nevertheless, research has also highlighted distinct differences between intrafamilial and extrafamilial victimisation in terms of: the developmental characteristics of the victims (Ray, Jackson, & Townsley, 1991); the characteristics of victimisation (Fischer & McDonald, 1998); risk factors for and protection against victimisation (Black, Heyman, & Smith Slep, 2001; Fischer & McDonald, 1998); and the impact of victimisation on the young person (Clemmons, Walsh, DiLillo, & Messman-Moore, 2007). It could therefore be argued to be more effective to further the exploration of these victimisation classifications individually to gain a comprehensive understanding of their characteristics and associated factors. This will allow for a more focussed, detailed exploration of intrafamilial and extrafamilial victimisation separately. Following this, a more holistic, comparative, approach can be adopted to look at victimisation on the whole, investigating similarities and contrasts between intrafamilial and extrafamilial victimisation.

Based on this latter argument, this thesis focuses on young people's experiences of extrafamilial victimisation only. It is acknowledged that restricting the focus of the thesis in this way means that a large proportion of childhood victimisation is ignored. The benefit of this, however, means that a more thorough exploration of extrafamilial victimisation can be achieved, thereby addressing an important limitation of the literature to date.

1.3.1. The definition of extrafamilial victimisation used for this research.

The current research explores extrafamilial victimisation in the form of; property victimisation, physical victimisation, bullying, dating violence, sexual violence, and indirect/ witnessed victimisation. This definition is the same as that used in large national surveys by Finkelhor, Ormrod, Turner, and Hamby (2005b) in the USA, and the NSPCC (Radford et al., 2013) in the UK, with the exception that all references to family-perpetrated victimisation were excluded from the current study. The findings are therefore comparable to those from large-scale national surveys. The six categories of victimisation covered by this term are varied and are briefly outlined below and in Figure 1.

1.3.1.1. Crime

'Conventional crime' encompasses acts which would commonly be considered 'criminal' when conducted against an adult, including acquisitive crime (i.e. robbery, theft) and assault (Finkelhor, 2008).

1.3.1.2. Bullying/ peer victimisation/ peer harassment

Bullying, peer victimisation, and peer harassment all refer to a process of aggression, harassment and abuse carried out by another young person or group of young people. This is said to be deliberate and characterised as a systematic and repeated abuse of power (Olweus, 1999) through direct and indirect means (physical, emotional/verbal and relational victimisation) (Cook, Williams, Guerra, Kim, & Sadek, 2010), including cyber-victimisation (the use of electronic communication devices, such as the internet or mobile phones, to victimise other people).

1.3.1.3. Violent victimisation and ‘community violence’

Violent victimisation generally refers to the direct experience or threat of violent victimisation, as well as witnessing and hearing about violence in real-life (i.e., not in the media). Authors also define this form of violence as 'community violence' to emphasise location.

1.3.1.4. Sexual victimisation/ abuse

Sexual victimisation/ abuse tends to take two main forms: contact sexual abuse which encompasses all forms of unwanted touching, including rape; and non-contact sexual abuse which refers to sexual exposure or solicitation to engage in sexual activity, including on the internet (Wyatt & Peters, 1986). It also includes sexual harassment by peers, such as unwanted sexual touching or sexual name calling (Attar-Schwartz, 2009).

1.3.1.5. Dating violence/ intimate partner violence

‘Dating violence’ or ‘intimate partner violence’ refers to psychological, physical, and sexual aggression between young, dating partners (i.e., boyfriend/girlfriend or ‘a date’) (Shorey, Stuart, & Cornelius, 2011). This form of abuse necessarily possesses a relational element committed by a known intimate partner which sets it apart from other forms of extrafamilial victimisation (where the perpetrator could be unknown).

1.3.1.6. Witnessed/ indirect victimisation

Young people are often witnesses of victimisation against other people and this has been deemed a distinct form of victimisation (Kuther, 1999). This generally focuses on the direct witnessing of victimisation against another person in real-life (i.e., not in the media), with some researchers including hearing about the

victimisation of others or knowing someone who has been victimised. This category of victimisation is commonly known as witnessed/ vicarious/ indirect victimisation/ ‘covictimisation’ (referred to as indirect victimisation in this thesis).

These six categories of extrafamilial victimisation highlight the variety and complexity of extrafamilial victimisation. It is therefore beneficial to take a holistic approach towards research in this area to allow for a comprehensive assessment of the scale and nature of the problem. In recognition of this, this thesis explores all six categories of victimisation..

1.4. Historical Context of Extrafamilial Victimisation

Media reports present growing concern regarding violence in and around schools within the UK, often focusing on weapon use and gang-related violence amongst young people ("Knife crime and gang violence on the rise as councils reduce youth services," 2011). Incidents such as the stabbing of teenager Luke Walmsley at school in 2004 ("Schoolboy killer gets life term," 2004), and the killing of schoolgirl Christina Edkins on the bus on her way to school in March 2013 ("Bus Stabbing: Christina Edkins Killed," 2013), have received a lot of media attention. This contributes to a sense of fear regarding the safety of children and young people within our schools and communities, yet incidents as extreme as these are rare. However, many ‘lower level’ incidents of violence and victimisation occur in these settings on a daily basis and tend to go unnoticed or viewed as ‘normal’ child behaviour.

The personal costs for young victims can be extreme; an estimated 16 children in the UK kill themselves as a result of bullying in schools every year (Brown & Winterton, 2010). Research also shows increased vulnerability to further

victimisation following initial exposure (Finkelhor, 2008, Radford et al., 2013). In terms of the financial costs, extrafamilial victimisation can result in a need for: direct medical costs to treat victims; money to cover the cost of special education, psychological and welfare services for victims as a result of their victimisation; and continuing financial costs to deal with the increased risk of subsequent juvenile and adult offending by victims (Butchart & Pinney Harvey, 2006). However, the financial cost of extrafamilial childhood victimisation is seldom investigated or reported in the UK and it is difficult to establish exact figures. Costs associated with the overall crime rates in England and Wales fail to differentiate between adult and child victims (Home Office, 2005) and adult figures are not directly comparable to young people as they include factors such as ‘loss of earnings’. Further UK research is therefore needed to address this.

A report by UNICEF in 2007 revealed that the UK was in the bottom third on five (out of six) dimensions assessing child well-being across 21 OECD (Organisation for Economic Co-operation and Development) countries. This is based on the 2001 World Health Organization’s survey of Health Behaviour in School-age Children (HBSC), which sampled 1,500 young people in the UK at three ages (11, 13, and 15 years). Children in the UK displayed the highest level of risk-taking behaviour (smoking, using drugs and alcohol, early sexual activity and young pregnancy (based on teenage fertility rates)), had the lowest level of satisfaction in their relationships with peers (based on the reporting of peers as ‘kind and helpful’), had some of the highest levels of engaging in fighting behaviour in the past 12 months (over 40%), and some of the highest levels of being bullied in the past 2 months (over 30%). These figures show the UK to be falling behind many OECD countries in protecting children from harm within schools and communities. It is

therefore important that developments are made on a societal and local-level to effect change to better protect children and young people within the UK.

‘The Big Society’ was launched in 2010 by the Conservative- Liberal Democrat Coalition in England. The overarching aim of this policy was to create a ‘climate that empowers local people and communities, building a big society that will “take power away from politicians and give it to people”’ (Prime Minister's Office, 2010) to encourage community cohesion. Following this, the ‘Social Justice: Transforming Lives’ publication (HM Government, 2012) outlined a strategy which included: tackling child poverty, helping vulnerable and troubled families, and reducing juvenile offending and anti-social behaviour. These factors could have an indirect impact on reducing extrafamilial victimisation and create safer communities and environments for children and young people. However, there is no direct reference to reducing the victimisation of children and young people within schools or communities within either of these agendas. Other government interventions include the ‘Troubled Families Programme’, which aims to ‘get children back into school, reduce youth crime and anti-social behaviour, put adults on a path back to work and reduce the amount of money public services currently spend on them’ (Department for Communities and Local Government, 2012, p. 9). Again, the Troubled Families Programme fails to measure extrafamilial childhood victimisation as an outcome of its success despite family disruption, poor parenting, poverty, and a lack of school attendance (which are target areas for this intervention) often cited as important risk factors for extrafamilial victimisation (Cook et al., 2010). Additionally, the cost of working with children and young people who have suffered extrafamilial victimisation is not considered when assessing the cost-effectiveness of

such interventions. These are just a few examples which highlight a general lack of focus on young victims within the English government and criminal justice system.

Nevertheless, one important initiative developed to address the levels of crime and anti-social behaviour in and around schools, by and against children and young people, is the 'Safer Schools Partnership' (SSP). This joint initiative between the Department for Children, Schools and Families (DCSF); the Youth Justice Board (YJB); and the Association of Chief Police Officers (ACPO) was set up in 2002 as a new policing model for schools ("Safer School Partnerships," 2011). As such, the community and school partnership was designed to build closer working relationships between schools and the police (Bowles, Garcia Reyes, & Pradipto, 2005). The principle objectives of the SSP are to: reduce victimisation, offending and antisocial behaviour; identify young people at risk; work with schools on behaviour and discipline; help keep young people in full-time education; support vulnerable young people through the transition from primary school to secondary school; and create a safer learning environment for young people (Bowles et al., 2005). Examples of the work within the SSP initiative include restorative approaches to solving disputes within schools and the provision of police guidance to help schools manage low-level offending behaviour (T. Green, personal communication, January 15, 2010). There are over 450 SSPs across England and Wales ("Safer School Partnerships," 2011).

Two evaluative research studies have been carried out to explore the impact of SSPs. Bhabra, Hill and Ghate (2004) collected qualitative and quantitative data from 1,175 time one (T1; pre-SSP) and 859 time two (T2; post-SSP) young people attending 11 SSP schools and two high risk control schools. Additionally, Bowles et al. (2005) compared outcomes for young people attending 15 SSP schools (1,335

and 859 pupils at T1 and T2, respectively) and 15 matched control schools (699 and 281 pupils at T1 and T2, respectively). Taken together, these research studies have evidenced a reduction in truancy, offending and victimisation, and improvements in community engagement, pupils' sense of safety, identification of risk, and educational outcomes (the strength of the associations were not reported¹) (Bhabra, Hill, & Ghate, 2004; Bowles et al., 2005). These findings therefore show how a focussed, collaborative approach to tackling offending and victimisation in schools and communities can be effective in addressing these issues.

In summary, extrafamilial childhood victimisation appears to have been given little consideration in the development and evaluation of societal, community-based services. Additionally, the vast majority of research into extrafamilial victimisation has been carried out in the USA (e.g., Finkelhor, Ormrod, et al., 2005b) with very little comprehensive UK-based research. Whilst USA findings are useful in expanding our knowledge of extrafamilial victimisation, their practical utility when designing tailored interventions specific to the UK is limited. It is therefore imperative that a comprehensive understanding of the extent, characteristics, risk and protective factors for, and impact of extrafamilial victimisation is established for children and young people in the UK. Additionally, it is vital that preventative initiatives, such as the SSP, continue to develop in the UK and are informed by empirical research findings. The need for future research in this area therefore informed the overarching aims of this thesis. This was to firstly provide a large holistic assessment (survey) of extrafamilial childhood victimisation within England, and secondly to conduct a large systematic review of the

¹ For the remainder of this chapter, the strength of associations found by a research study is reported when reported in the original article, if absent in the original article then no effect sizes are given.

prospective longitudinal research literature investigating the risk and protective factors for extrafamilial victimisation.

1.5. Theories of Extrafamilial Victimisation

To gain a better understanding of extrafamilial victimisation, it is important to theoretically underpin the research in this area. There are a number of theories that attempt to explain why some young people become victims whilst others do not, and the main theories are outlined in Table 1.

Table 1.

Theories of extrafamilial victimisation

Theory	Description	Strengths and weaknesses
Routine Activities Theory (RAT) (Cohen & Felson, 1979; Miethe & Meier, 1994) (Schreck & Fisher, 2004)	One of the most popular and well-researched theories. Suggests the young person’s social structure and demographic characteristics affect their lifestyles and daily routine activities, which in turn, affects their exposure to offenders and victimisation.	Offers a way of understanding the processes leading to extrafamilial victimisation based on a combination of different factors. However, the theory has been criticised for being most useful in its explanation of stranger perpetrated crime and less applicable to interpersonal victimisation.
Target congruence model (Finkelhor, 2008)	Uses the term ‘target congruence’ to describe the characteristics of victims which may provoke a response from a potential offender. Three sub-categories of target congruence: 1) Target gratifiability: the victim possesses something the offender wants; 2) Target antagonism: the victim possesses attributes, skills, characteristics or possessions which provoke anger, jealousy or destructive impulses in the offender; and 3) Target vulnerability: specific attributes of a victim which make them vulnerable targets.	This theory is said to explain victimisation in most settings, offering an advantage over RAT. However, it offers little explanation as to when and how target congruence may be most likely to lead to victimisation (e.g., context and circumstance) and reduces the explanation of victimisation to victim characteristics only.
Life course perspective (Chen, 2009)	Suggests that the relationship between age and victimisation is curvilinear and variable; the	Offers a valid explanation as to the change in victimisation over time and highlights the

	nature and quantity of risk change over time. Can be said to integrate with RAT, suggesting that the individual's suitability as a target, their ability to protect themselves, and changes in guardianship protection change their risk for victimisation according to age.	importance of developmental influences. However, it has been criticised for being reductionist in its approach as it places little emphasis on self-control or environmental bonds.
Social-cognitive model (Perry, Hodges, & Egan, 2001)	Suggests children develop 'relational schemas' to represent family interactions which are applied to peer interactions and contribute to peer victimisation. These schemas include an image of the self and other and provide scripts for patterns of interactions.	The model links in with attachment theory and the socialisation perspective, and has received support from the wider literature demonstrating a link between victimisation and family environment/ relationships. However, the model can be criticised for being reductionist in its approach, placing little emphasis on environmental influences and assuming all peer victims come from negative family backgrounds.
Ecological system theory (Bronfenbrenner, 1979; Salzinger et al., 2002; Hong and Espelage, 2012)	Attempts to provide a holistic overview of the distal and proximal factors that interconnect to increase a young person's risk of exposure to violence in the community. These factors range from community and societal variables through to family and peer characteristics and relationships, and personal characteristics.	The theory provides a framework to combine the many levels of risk and protective factors identified in the victimisation literature. However, the theory does not offer an explanation as to how these factors come together to make victimisation more or less likely.

As can be seen from this table, the theories differ in the extent to which they encompass different areas of the young person's lives, along with their focus on the factors involved in exposure to extrafamilial victimisation versus an attempt to explain victimisation processes.

1.5.1. Routine activities theory

Unlike the other theories outlined in Table 1, the Routine Activities Theory (RAT) of extrafamilial victimisation provides a clear structure to facilitate understanding as to how and when victimisation may occur. It proposes that the young person's social structure and demographic characteristics affect their lifestyles and daily routine activities (Cohen & Felson, 1979) which influences their exposure to offenders and victimisation (Schreck & Fisher, 2004). There are four main elements to this theory: (1) the young person's proximity to crime, (2) exposure to crime and a motivated offender, (3) target attractiveness (based on the young person's individual characteristics), and (4) guardianship (Miethe & Meier, 1994). Therefore, the more time spent in locations in which there are offenders, a lack of effective guardianship, and heightened target 'attractiveness', the more likely victimisation will occur.

In association with these four elements, RAT recognises the influence of other factors in this process. Weaker familial bonds and poor parental attachment are noted as increasing the young person's likelihood of straying away from the home, and may also reduce parental protection (Schreck & Fisher, 2004). Indeed, Schreck and Fisher (2004) analysed survey data from 3,500 young people from the USA (grades 7 to 12), reporting significantly higher levels of violent victimisation in young people who spent more time away from home, whilst supportive family environments protected against victimisation. The family is also noted as regulating

the child's behaviour and appearance which may influence their attractiveness as targets (Schreck & Fisher, 2004).

Additionally, the peer context is said to be influential in that strong social bonds help to protect the young person whilst a delinquent peer group exposes them to risk (Schreck & Fisher, 2004). Peer delinquency, risky peer behaviour and various demographic characteristics (e.g., gender, ethnicity) were found by Schreck and Fisher (2004) to significantly increase exposure to victimisation. Those associating with delinquent peers are also said to be less likely to report victimisation to the police and therefore receive less police protection (Finkelhor, 2008). Increased risk of poly-victimisation (experiencing multiple victimisations of different types) has also been linked to living in dangerous, high-crime neighbourhoods and within risky environments where the schools and communities are unsafe (Finkelhor, 2008).

More recently, RAT has been applied to online settings in an attempt to explain exposure to online sexual victimisation and non-sexual harassment, and cyberstalking. Two studies carried out by Marcum, Ricketts, and Higgins (2010) and Reyns, Henson, and Fisher (2011) identified a number of variables relating to proximity and exposure to crime, target attractiveness, and, to some extent, guardianship online which significantly increased the odds of cyberstalking and sexual victimisation and non-sexual harassment online². These variables differed according to gender and some protective factors were identified. It must be noted, however, that these studies sampled university students (n=744 and n=974, respectively) aged 18 or over.

² Due to the large number of significant variables and associated odds ratios reported in these two studies (n=28 and n=8, respectively), the reader is referred to the original research for specific details.

Critiquing RAT, Finkelhor (2008) suggests the theory is best applied to stranger-perpetrated criminal victimisation on the streets and may have limited utility for forms of interpersonal victimisation, such as dating violence. The theory has also been criticised for failing to provide a useful explanation as to why young people who do not put themselves at risk are victimised by acquaintances outside of the family (Finkelhor, 2008). Whilst these criticisms may be justified, RAT does provide a useful and popular grounding to help explain a number of different forms of extrafamilial victimisation within the research literature on victimisation and offending. Study one of this thesis aimed to explore the prevalence, characteristics and location of extrafamilial victimisation and the associated factors which may make exposure to victimisation more or less likely to occur in certain settings. The RAT was therefore selected over other theories to help drive this research and provide a framework within which the findings could be understood.

An increasingly accepted view within the extrafamilial victimisation literature is the prevalence of a multitude of risk and protective factors for childhood victimisation which operate across different levels of proximity to the young person. These include: individual characteristics; factors within the child's family, environment and neighbourhood; school-related variables; and factors within the wider social context. These variables interact to increase or decrease a young person's vulnerability and each individual is likely to follow their own unique pathway to victimisation. Whilst the RAT alludes to the influence of a multitude of factors on exposure to extrafamilial victimisation, it does not provide a clear framework within which these can be organised and understood. Indeed, the only model which allows for this in Table 1 is the Ecological Systems Theory. In doing

so, it provides a clear, holistic overview of the multitude of risk and protective factors operating at differing levels of the young person's ecology.

1.5.2. Ecological Systems Theory

The ecological theory devised by Bronfenbrenner (1979), and developed by Cicchetti and Lynch (1993), proposes that the young person's ecological contexts are composed of differing levels which vary in their proximity to the young person. The macrosystem is the most distal factor and relates to cultural beliefs and values which may influence societal and family functioning. The exosystem relates to the neighbourhood and family settings the young person lives in, whilst the final level, the microsystem, is the most proximal and relates to the family environment which young people and adults experience and create. Cicchetti and Lynch also refer to the young person's level of ontogenic development which relates to the individual and their developmental adaptation. By recognising all levels of the young person's ecology, whilst taking into account the individual as an important element of his/her environment, the interaction between the young person, his/her environment, and change over time is accounted for. Applied to extrafamilial victimisation, this theory expands on RAT by placing greater focus on the interconnection between the community, family, and individual characteristics for subsequent violence exposure.

An ecological framework for understanding exposure to extrafamilial victimisation was set out by Salzinger, Feldman, Stockhammer, and Hood (2002) in their review of the community violence literature. This recognises that the influence of factors at the most distal level (community/ neighbourhood variables) is likely to be mediated through factors at more proximal levels (peer and family systems and relationships). This has recently been developed by Hong and Espelage (2012) with

their Ecological System Analysis Model which attempts to explain bullying and peer victimisation by separating out the different ecological systems onto six levels:

1. Youth characteristics,
2. The microsystem (interaction between the young person and individuals or groups of individuals within their immediate settings),
3. Mesosystem (interrelations between two or more microsystems),
4. Exosystem (impact of the environment beyond the immediate setting, such as the neighbourhood),
5. Macrosystem (cultural 'blueprints' such as wider cultural beliefs),
6. Chronosystem (consistency or change in the individual or environment over time).

Within this model, protective factors are said to operate to reduce risk or protect against victimisation. Specifically, victimisation is said to be related to individual traits, family experiences, parental involvement, school climate, and community characteristics. In conclusion, the authors highlight the need to recognise these complex systems to improve the understanding of victimisation and the design and impact of interventions (Hong & Espelage, 2012).

Espelage and Swearer (2009) tested the social ecological theory in relation to extrafamilial victimisation on a sample of 7,376 American school children. They found that school climate had an important impact on risk of bullying perpetration and victimisation and significantly buffered the potentially negative impact of low parental caring and low positive peer influences on risk of peer victimisation. This provides support for this theory by demonstrating the interaction between elements within the distal and proximal levels of the young person's ecology.

Research suggests the ecological systems theory has application for community violence exposure and peer victimisation from the victim and offender perspective (Lee, 2011), and can also be applied to theories of risky sexual behaviour in adolescents (Kotchick, Shaffer, Miller, & Forehand, 2001). Additionally, an ecological system approach has been applied to explain the impact of ecology and the child's individual characteristics on the development of adaptive and maladaptive outcomes following victimisation (Cicchetti, Toth, & Maughan, 2000). The theory therefore has the potential to develop the understanding and response of those working to protect young people from being exposed to different types of extrafamilial victimisation and its subsequent impact. As such, it offers more of a framework than RAT to recognise the different elements of the young person's ecology and develop our understanding as to how they may interact to make victimisation more or less likely. It can also be applied to help develop research exploring the impact of extrafamilial victimisation on the young person. Nevertheless, the ecological framework does not focus on the process of becoming a victim in the same way that the RAT does and does not, at present, offer an explanation as to *when* and *how* victimisation may occur.

Additional aims of study one and study two were to explore the risk and protective factors influencing extrafamilial victimisation, to explore the interconnections between these factors, and to understand how victimisation may have an impact on victims. In doing so, the ecological systems model was selected to help develop and contextualise this research.

Of all the theories developed in this area, RAT and ecological systems theory were selected to provide the theoretical underpinnings to, and to help develop the

ideas behind, this thesis. This is due to their benefits in helping to understand how and when victimisation may occur, and their recognition of a holistic range of factors involved in the onset and impact of extrafamilial victimisation, respectively. Because of the differences in their utility, the two theories were used to develop different elements of the research and to help interpret the findings reported. It is felt that doing so enhances the current research by drawing upon the strengths of two widely respected theories.

Chapter 2. Literature review

2.1. Introduction

The current chapter aims to outline what is known about childhood victimisation within the UK and elsewhere, discussing the prevalence, characteristics, and location of extrafamilial victimisation, the associated factors and known predictors of extrafamilial victimisation, and the impact of extrafamilial victimisation on the psychological well-being of young people. In doing so, gaps in our knowledge and the need for further research is identified and used to inform the aims of the two studies presented within this thesis. The search terms used to identify the literature outlined in this chapter can be found in Appendix 1. Where the strength of an association has been quantified within a published research study, this has been reported. If absent in the original article then no effect sizes are given.

2.2. Prevalence of extrafamilial victimisation

It is important to gain an accurate description of the levels and types of extrafamilial victimisation experienced by young people in the UK. This is to allow schools, communities, families and policymakers to make the most informed decisions on how to respond to these threats and how best to protect young people. Once prevalence has been established, the dynamics of extrafamilial victimisation can be explored to help develop theory and research-based interventions. However, it is difficult to establish a true estimate of the extent due to a number of methodological issues (Brown & Winterton, 2010; Radford et al., 2013). These include variations in: the definitions of victimisation used; the methodology used and questions asked; and the characteristics of the population on which the research

is based (Buka, Stichick, Birdthistle, & Earls, 2001; Ezzati, Lopez, Rodgers, & Murray, 2004; Radford et al., 2013). Furthermore, prevalence rates are likely to differ across countries and cultures (Wolke, Woods, Stanford, & Schulz, 2001).

Victimisation is often defined and explored in different ways in terms of: the comprehensiveness of the definition used, the duration of victimisation assessed, the location of victimisation explored (e.g., school and/or community-based), and the criteria used to classify 'victims'. In a review of child victimisation questionnaires, Hamby and Finkelhor (2001) highlight how self-report methods differ in many of these areas and emphasise the effect this may have on outcome. The methodology used in a study must therefore be recognised when reviewing research findings as this is likely to influence prevalence rates.

Self-report measures represent the individual's perception of their own victim experiences, whilst measures completed by other people reveal external perceptions of victimisation. Both have a potential impact on the information collected in relation to response bias or a lack of knowledge on the part of the respondent (Crick et al., 2001; Pellegrini, 2001). Indeed, a review of prevalence studies looking at the subtypes of peer victims found that the prevalence of aggressive victims (victims who also display aggressive behaviour) ranged from approximately 2% to 29% when self-report measures were used. This compared to a range of 4% to 8% when peer nomination, teacher-report or multi-informant approaches were used (Schwartz, Proctor, & Chien, 2001).

Additionally, the nature and extent of victimisation differs for males and females as they move from childhood into adolescence (Chen, 2009; Crick et al., 2001; Finkelhor 2008). Using bullying as an example, a review of the literature by Perry, Hodges, and Egan (2001) states that males are commonly seen to face a

higher prevalence of physical victimisation whilst females are more likely to be relationally victimised. Therefore, age and gender are likely to have an impact on the prevalence rates of the different categories of extrafamilial victimisation under investigation.

The most effective way to minimise the inconsistencies in prevalence research would be to develop standardised, universal definitions of victimisation. The development and use of reliable measures of victimisation is also needed, as is more than one informant when possible. Nevertheless, a number of prevalence studies have been carried out which often use large samples and, in some cases, are conducted on a national scale. These provide an understanding of current levels of extrafamilial victimisation which can be interpreted in light of the methodological limitations outlined above.

2.2.1. Findings from the USA

The USA are paving the way in child victimisation research with pioneering work being carried out by David Finkelhor and his team at the 'Crimes Against Children Research Centre' (<http://cola.unh.edu/ccrc>). In the last decade they have conducted two large scale comprehensive telephone surveys within the USA; the national 'Developmental Victimization Survey' (DVS) carried out between 2002 and 2003 ($N = 2,030$) (Finkelhor, Ormrod, et al., 2005b), and the 'National Survey of Children's Exposure to Violence' (NatSCEV) in 2008 ($N = 4,549$) (Finkelhor, Turner, Ormrod, & Hamby, 2009). Both surveys collected data from a representative sample of parents/caregivers (of children <10) and young people (aged 11+) regarding the child/ young person's victim experiences. This was in relation to child maltreatment, physical victimisation, sexual victimisation, property victimisation,

and indirect and witnessed victimisation experienced within the family, school and community. Therefore, both intrafamilial and extrafamilial victimisation was assessed.

Findings revealed that 61% and 71% of participants experienced some form of victimisation within the past 12 months (Finkelhor, Ormrod, et al., 2005b; Finkelhor, Turner, Ormrod, & Hamby, 2009), which increased to 87% for lifetime exposure (Finkelhor, Turner, Ormrod, & Hamby, 2009). On average, three different victimisation types were experienced within a 12 month timeframe (Finkelhor, Ormrod, et al., 2005b) and 86.6% of children who reported being a victim over their lifetime also reported victimisation within the past year (Finkelhor, Turner, Ormrod, & Hamby, 2009). Whilst other, smaller studies of a similar nature have been carried out in the USA, this research by Finkelhor et al. is the most comprehensive and has set the standard for research in this area.

2.2.2. Current Knowledge on the Extent of Extrafamilial Victimisation in the UK

Our knowledge of victimisation specific to the UK is limited. The National Society for the Prevention of Cruelty to Children (NSPCC) has recently completed the first national survey of child maltreatment in the UK, from which preliminary findings have been reported (see Radford et al., 2011; 2013). This research used a computer-assisted self-interviewing (CASI) technique within the homes of a random probability sample of parents (of children aged <11) and young people (aged 11-17, and 18-24). Of the 11-17 year olds ($N = 2,275$), 84% reported some form of victimisation within their lifetime (LT) and 57% reported victimisation within the past year (PY; Radford et al., 2013). The mean number of lifetime victimisation

experiences reported by this group was five, with two in the past year. More detailed findings from this research are still to be published, yet these figures highlight likely similarities between USA and UK victimisation prevalence rates.

The NSPCC survey represents a positive shift towards a more holistic exploration of child victimisation within the UK. Aside from this however, our understanding of extrafamilial victimisation in the UK comes from official reports and smaller surveys exploring a targeted area of victimisation (e.g., bullying). Whilst this is useful in providing a focussed assessment of a specific victimisation type/category, it limits our understanding of the range of victim experiences young people are exposed to and fails to acknowledge interaction between experiences. It also presents a potential issue in that the studies exploring the different types of extrafamilial victimisation are likely to have used different definitions and classifications of victimisation. Nevertheless, the following sections outline current UK findings on the prevalence of different types of extrafamilial victimisation.

2.2.2.1. Crime.

The national British Crime Survey (BCS) explores self-reported victimisation amongst young people which would be classified by the police as ‘crimes or criminal acts’. Latest statistics from the BCS show that 17% of the 3,849 children and young people surveyed were a victim of crime once or more between October 2011 and September 2012 (based on ‘broad’ statistics which include ‘lower level’ criminal victimisation) (Chaplin, Flatley, & Smith, 2011). Of these victims, 12% reported being a victim of violent crime (including robbery and theft), 6% were victims of personal theft, and 2% were victims of vandalism. Notably, 62% of the violent incidents were perceived to be part of a series of bullying (Smith, Lader, Hoare, & Lau, 2012). Exploring sample differences, males and children with a long-

standing illness or disability were more than twice as likely as females and non-disabled children to have been violently victimised (Chaplin, et al., 2011).

These figures therefore suggest around one-fifth of children and young people become victims of crime in the UK (as defined by the law in England and Wales) between the ages of 10-15. These incidents are often related to bullying however, and commonly occur in or around school (Chaplin et al., 2011).

2.2.2.2. Bullying/peer victimisation.

A review of the UK bullying research (which included governmental surveys as well as large and smaller-scale academic surveys) by Brown and Winterton (2010) suggests that around 50% of primary school pupils and 25% of secondary school pupils report being bullied at school. The most common type of bullying is suggested to be verbal abuse. Findings from the latest NSPCC survey suggest that 59.5% of 11-17 year olds experienced peer victimisation (any physical, sexual or emotional abuse by a person under the age of 18), and 35.3% of these incidents occurred within the past year (Radford et al., 2013).

Cyberbullying has more recently become a focus within the research literature. One survey in England explored rates of bullying and cyberbullying over the 'past couple of months' amongst 533 children and young people, aged 11-16 (Smith et al., 2008). Findings suggested that for 'traditional' bullying (not including cyberbullying), 14.1% of young people reported being bullied often (two or three times a month, once a week, or several times a week) and 31.5% reported being bullied once or twice. The prevalence of cyberbullying was lower with comparable figures of 6.6% and 15.6%, respectively. There were also more young people who had never been a victim of cyberbullying (77.8%) compared to those who had never been a victim of general bullying (54.3%). The most common form of cyberbullying

was through phone calls and text messages. These figures therefore suggest that cyberbullying is not as widespread as general bullying amongst young people in the UK. However, a survey of 3,300 10-15 year olds carried out by the Anti-Bullying Alliance in 2010 (Brown & Winterton, 2010) suggested almost half of the young people surveyed experienced online cyber abuse, and 28% experienced abuse via their mobile phone. Further research is needed to explore the prevalence of cybervictimisation in the UK given the rapid growth and developments in social media communication amongst young people.

2.2.2.3. Physical violence.

There are limited findings on the prevalence of physical violence separate to bullying in the UK. An annual survey of the number of people attending one of 54 hospital Emergency Departments, Minor Injury Units, or NHS walk-in centres in England and Wales suggests there is a yearly decline in the rates of children and adults seeking medical treatment for violence-related injuries (Sivarajasingam et al., 2012). For the 0-10 age group this declined by 26% from 2011-2012, and 24% for the 11-17 year group. However, the rates of children and young people seeking medical help for violence-related injuries remain high; in 2012 the estimated figure for 0-10 year olds was 1,557 (males) and 686 (females). For 11-17 year olds the rate was higher at 21,905 (males) and 8,606 (females). These figures represent only those young people seeking medical help for their injuries and do not include all young people who have been violently victimised. Young people who have suffered violence-related injuries at the hands of a parent or caregiver (i.e., intrafamilial victimisation) will also be included.

The figures on physical violence reported by the NSPCC survey (Radford et al., 2013) showed that 56% of 11-17 year olds were physically victimised by an

adult or peer outside of the family over the LT, of which 28.2% was in the PY. Physical violence therefore appears to be highly prevalent amongst young people in the UK.

2.2.2.4. Sexual victimisation.

It is difficult to establish prevalence rates for the sexual victimisation of children and young people perpetrated by individuals outside of the family, as authors often fail to distinguish between intrafamilial and extrafamilial sexual abuse. There are also discrepancies in the way in which sexual victimisation is defined, particularly in relation to whether the focus is on contact and/or non-contact sexual abuse, the range of experiences classed as abusive, and the inclusion of ‘consensual’ sex between an older child and adult. These issues were identified in the sexual abuse research literature almost three decades ago (Wyatt & Peters, 1986) and still remain a methodological problem today. As a result, inconsistencies in prevalence rates are often identified (Andrews, Corry, Slade, Issakidis, & Swanston, 2004; Wyatt & Peters, 1986).

In a meta-analysis of 513 world-wide articles or reports on the prevalence of child sexual abuse (nine of which were UK studies carried out between 1979 and 2001), prevalence rates of between 2% and 62% were reported (contact and non-contact sexual abuse, not defined by relationship to perpetrator) (Andrews et al., 2004). In the latest NSPCC study (Radford et al., 2013), 16.5% of the 11-17 year old sample ($N = 2,275$) disclosed sexual abuse (contact and non-contact) by any adult or peer, 9.4% of which occurred in the past year. The majority (65.9%) of contact sexual abuse in this age-group was perpetrated by someone under the age of 18 years and 1.4% was said to have been perpetrated by an adult living outside of the family home (including non-resident family members), 0.3% of which was in the

past year. Strangers were found to pose the greatest risk in this sample and were found to be responsible for approximately 50% of the abusive experiences perpetrated by an adult living outside of the family. The comparable figures from the USA are slightly lower than this with 6.1% of young people reporting sexual victimisation within the past year (Finkelhor, Turner, Ormrod, Hamby, & Kracke, 2009).

A 'YouGov' poll of 788 16-18 year olds in 2010 (End Violence Against Women, 2010) found that 29% of females reported unwanted sexual touching at school, 71% of males and females reported hearing sexual name-calling on a weekly basis, and 28% of males and females reported seeing sexual pictures on phones. In addition, students reported rarely hearing from teachers that this form of behaviour is unacceptable and 40% said they didn't receive lessons on sexual consent (or didn't know if they did). Additionally, the increase in anonymous online video chat services, such as 'Chatroulette' and 'Omegle', mean that young people are at increased risk of being exposed to sexual images and being engaged in sexually explicit conversations. Observations have shown that 20-30% of users of 'Chatroulette' are young people many users on these sites (of all ages) engaging in sexually explicit behaviour (Xing et al., 2011).

The above figures suggest that some form of sexual abuse is experienced by around one-fifth of children and young people in the UK. Findings on school-based sexual harassment suggest a culture of sexually abusive language being used in and around schools, with apparently little in the form of education to address this. This research also shows how developments in the internet and online technology make it harder to keep young people safe.

2.2.2.5. Intimate partner abuse.

Exploring the prevalence of intimate partner abuse/dating violence, the NSPCC conducted a school survey of 1,353 young people aged 13-16 in 2009 (Barter, McCarry, Berridge, & Evans, 2009). Figures showed that 72% of females and 52% of males reported emotional violence at the hands of a boyfriend or girlfriend. Additionally, 25% of females and 18% of males reported being a victim of physical violence, and 31% of females and 17% of males reported being a victim of sexual violence (any form of unwanted sexual act from kissing through to being physically forced to have sex). The most recent figures from the NSPCC suggest that 8% of young people experienced intimate partner violence over their LT, and 5% in the PY (Radford et al., 2013). Both studies explored physical, emotional and sexual victimisation and it is likely that the lower prevalence rates found within the latter study is, in part, due to fewer questions on specific types of intimate partner abuse being asked than the earlier survey.

2.2.2.6. Witnessed victimisation.

Little research has been carried out in the UK exploring the prevalence of witnessed or vicarious extrafamilial victimisation. NSPCC figures suggest that 61% of young people were exposed to community violence (witnessed attack and/or witnessed burglary), of which 31% occurred within the PY (Radford et al., 2013). These figures are slightly higher than those within the USA-based survey, in which 25.3% reported having witnessed a violent act in the community (Finkelhor, Turner, Ormrod, Hamby, et al., 2009). The USA statistics, however, ask more questions relating to witnessed victimisation and include incidents such as witnessed shootings

and murder. Further research is therefore needed to explore the prevalence of witnessed victimisation amongst children and young people.

The above literature presents an overview as to the current prevalence of different categories of extrafamilial victimisation experienced by young people in the UK. However, to gain an understanding as to the extent of this problem, we have to rely on the amalgamation of findings from a number of prevalence studies which have sampled different populations of young people and employed differing definitions of victimisation. It is therefore important that there are developments in the number of holistic studies carried out in the UK to bring all of these findings together and provide a thorough exploration of extrafamilial victimisation within varying large-scale population surveys. In addition, limited attention has been given to the characteristics of the perpetrators of extrafamilial victimisation against young people, thus limiting our knowledge. As such, more information is needed on the age and gender of these perpetrators, the number of perpetrators who commonly commit each category of victimisation, and the relationship between the victim and the perpetrator. Study one of this thesis was therefore designed to provide a survey of all forms of extrafamilial victimisation experienced by a large sample of English young people. In doing so, a comprehensive overview of victimisation within one study could be gained which would allow for the investigation of areas lacking in the current research literature, such as the characteristics of offenders. The specific objectives of this survey are outlined in Chapter 3.

2.2.3. Multiple Victimization

Figures from the USA and UK suggest that childhood victimisation is rarely a one-off event, with children and young people reporting having been victimised, on average, 3.7 times over the lifetime (LT) (including intrafamilial victimisation) (Finkelhor, Ormrod, & Turner, 2009b). Indeed, Finkelhor, Ormrod, and Turner (2007b), using data collected as part of the DVS, found that of those young people who suffered any type of LT victimisation, 69% went on to experience an additional, different type of victimisation within the year preceding the survey (past year (PY)). These young people were said to be three to six times more likely to suffer further victimisation than those young people who had not been victimised. It is therefore of great importance that we gain an understanding of the processes involved in victimisation across a lifespan to work towards the prevention of this cycle of abuse.

Three types of victims can be identified based on the frequency of their victim experiences. ‘Single-incident’ victims are those who experience a sole act of victimisation and would appear to be in the minority based on previous statistics. ‘Chronic victims’ represent those who repeatedly experience the same form of victimisation over their lifespan, often (but not always) by the same perpetrator. Finally, ‘Poly-victims’ (see below) are those young people who experience a multitude of different types of victimisation, on many different occasions, by the same or a different perpetrator. It is for this final group that Finkelhor suggests victimisation represents a ‘condition’ rather than an ‘event’ (Finkelhor, Ormrod, & Turner, 2007a).

Different types of victimisation have been found to co-occur more often with other types of victimisation (Finkelhor et al., 2007a). In their 11-17 year old sample

of young people, Radford et al. (2013) reported a significantly greater risk of other types of victimisation following maltreatment by parents or caregivers in childhood (risk ratios ranging from 1.24- 3.23). Serious types of victimisation, such as kidnapping and rape, have also been found to have a higher association with other forms of victimisation; more than 75% of young people who had been raped were poly-victims experiencing, on average, seven types of victimisation within the last year. This is compared to 'less serious' types of victimisation such as bullying and peer/sibling assault (Finkelhor et al., 2007a). This suggests that exposure to incidents such as rape may make an individual more vulnerable to experiencing further victimisation. Alternatively, it may suggest an increasing scale of victimisation from less severe forms of exposure leading to more severe victimisation over time.

2.2.3.1. Poly-victimisation.

Poly-victimisation has received increasing attention in the last decade due to the high amounts of victimisation poly-victims experience and the increased impact it appears to have on them (Finkelhor et al., 2007a). In the DVS by Finkelhor et al., PY poly-victims were identified as those young people who experienced four or more (i.e., higher than average) different types of victimisation over the course of a year (Finkelhor et al., 2007a). LT poly-victims were defined as those who scored within the highest 10% of their age group in terms of the number of different types of victimisation they experienced (Finkelhor, Ormrod, & Turner, 2009a). Using data from the DVS, PY poly-victims were found to make up 24% of the total sample (Finkelhor et al., 2007a). Of the 11-14 year age group, 10.3% were classed as LT poly-victims and 10.2% of the 15-18 year age group (Finkelhor, Ormrod & Turner, 2009b). Of these, 59% of poly-victims had experienced victimisation at the hands of

both family (intrafamilial) and non-family members (extrafamilial), highlighting an overlap in these two forms of victimisation (Finkelhor, Ormrod, Turner, et al., 2009).

Research looking at the demographic characteristics of poly-victims has revealed differences between them and lower-level (non-poly) victims. Finkelhor et al. (2007a) found PY 'high' poly-victims (experiencing seven or more victimisation types) experienced a significantly greater amount of lifetime adversity (mean 5.6 compared to 2.4), were significantly more likely to be black (22% compared to 16%), have a below average socio-economic status (36% compared to 25%) and reside in one-parent households (36% compared to 22%) compared to PY lower-level victims, and were significantly older (13.5 years compared to 9.5 years) than the sample overall. Similarly, Radford et al., (2011) found LT poly-victims in the UK (11-17 year old sample) were significantly more likely to be older (15 years compared to 14), have special educational needs or a disability (20.7% compared to 12%), have a parent with physical, learning, or psychiatric problems (34.5% compared to 20.9%), and have higher rates of 'non-victimisation adversity' (such as parental divorce or the death of a family member, average of three compared to one experiences). To explore the predictors of poly-victimisation from one year to the next, Finkelhor, Ormrod and Turner (2009b) found the child's age, being of non-Hispanic ethnicity, living in single and step-parent households, number of older siblings, number of family problems and living in dangerous families were all significant positive predictors of becoming a poly-victim.

These research findings suggest there may be differences in the individual and familial characteristics of poly-victims compared to lower-level victims, along with differences in the types of victimisation experienced. However, further research

is needed to explore this as the current literature is sparse. At present, little is known about the characteristics of poly-victims and very limited UK research has been carried out. Understanding more about this group of young people may help to indicate possible areas for intervention following initial victimisation, and help identify those most at risk of repeated victimisation. Using the information collected within study one of this thesis, PY and LT poly-victimisation was able to be explored in further detail. In doing so, the prevalence of poly-victimisation within an English sample of young people could be established, as could the characteristics of these victims and potential differences between them and non-poly-victims. The specific objectives are outlined in Chapter 3.

2.3. Geographical location of extrafamilial victimisation.

As the research base exploring the prevalence of extrafamilial victimisation has developed, there has been increasing interest in the geographical location of extrafamilial victimisation and the possibility of differentiating victimisation on the basis of location. Questions regarding the location of extrafamilial victimisation have therefore been incorporated into UK prevalence surveys and have revealed differences in the prevalence of victimisation according to location. In the 2011 British Crime Survey (BCS) for example (Chaplin et al., 2011), the majority (56%) of violent acts reported by children occurred in and around school, 89% on a weekday and 88% during daylight. For theft, similar findings were reported with 46% of acts occurring in and around school. These findings suggest that young people are not as safe in the school as they should be and it is therefore of great importance that further research is carried out to explore the geography of victimisation in more detail. However, UK research in this area is limited and

surprisingly little is known about the location in which different types of extrafamilial victimisation occur within England and the rest of the UK.

Internationally, a greater amount of research has explored the geography of extrafamilial victimisation, improving our understanding of the dynamics of, and the unique features and overlap in, victimisation experienced in school and community environments. In the USA, Turner and colleagues used data from the DVS to explore the location of five different forms of peer victimisation: assault, sexual victimisation, physical intimidation, emotional victimisation, and property crime (Turner, Finkelhor, Hamby, Shattuck, & Ormrod, 2011). The findings were important as they suggested that victimisation was location-specific; peer assault and peer emotional victimisation occurred most commonly at school (58.5% and 82%, respectively), and physical intimidation and property victimisation occurred at equal rates in the school and elsewhere. In contrast, dating violence (72.2%), assault with a weapon (52.9%), and sexual victimisation (63.3%- 825%, with the exception of sexual harassment) were more likely to occur outside of the school (i.e., in the community).

Other research from the USA suggests that the majority of sexual assaults by an acquaintance occur on school grounds and at greater levels amongst middle school students (54%) compared to high school students (40%) (Young, Grey, & Boyd, 2009). This was an internet survey of 399 middle-school and 687 high-school students in south-eastern Michigan. In Australia, a survey of 1,284 students attending 25 government and private schools found that 50% of pupils reported being bullied by peers when attending school and 25% by peers in the community (outside of school) (Delfabbro et al., 2006). This is supported by research by Turner et al. (2011) within the DVS who found that the majority of young people in their

USA sample (53%) experienced all of their most recent peer victimisation within the school, compared to 27% of young people who experienced it all in the community. An additional 20% of young people experienced victimisation in the school and 'elsewhere', therefore creating three groups of young people based on the location of their victim experiences.

There is also research to suggest that the severity of victimisation is linked to location. Violent victimisation (17.9%), property victimisation (20.9%), and violent delinquency (35.4%) have been found to be more prominent during school hours than any other time, yet more serious violent offences (aggravated assault (20%) and being threatened with a beating (15.2%)) have been found to occur more often in the community, outside of school hours, for young people in USA school grades six to 12 (Soulé, Gottfredson, & Bauer, 2008). This may be due to the higher concentration of young people and their property within the school during the school day, coupled with increased guardianship which may prevent against the most serious forms of victimisation (Soule et al., 2008). Additionally, Young et al. (2009) found sexual assault on the school grounds (as reported by 1086 young people in USA school grades seven to 12) to be perceived by victims as significantly less upsetting (OR= 0.77) than sexual assault experienced in the community.

Looking at young people who experienced peer victimisation in multiple settings, Turner et al. (2011) found a significantly higher percentage of these young people to have experienced injury (38.7%) and fear (28.6%) than young people victimised just in the school (12.3% and 7.4%, respectively) or community (15.9% and 8.6%, respectively). This was based on a representative sample of 2,999 youth aged six to 17 from the 2008 NatSCEV. They also found that significantly more older young people (14-17 years) had more victimisation in both the school *and*

elsewhere (42.8%), compared to six to nine year olds (22.2%). This is likely to be related to the increasing independence that older young people are given (Turner et al., 2011) and thus increased amounts of unsupervised activities in both settings.

The above findings suggest the most common locations for the occurrence of extrafamilial victimisation differ according to the type of victimisation being assessed, but it seems that a large amount of victimisation occurs within the school and that the severity of extrafamilial victimisation is linked to location. Based on these findings, it is important that the UK research develops in this area to provide a greater understanding as to how extrafamilial victimisation may vary according to location. In doing so, intervention programmes designed to address victimisation in UK community or school-based settings can become more tailored to specific, most likely instances of victimisation. This gap within the literature led to a further aim of the thesis; to explore the location of each type and category of victimisation investigated within the English-based victimisation survey carried out in Study one. This is with the intention of establishing whether patterns of victimisation can be identified based on school and community settings. Further objectives of this part of the research can be found in Chapter 3.

2.4. Extrafamilial victimisation ‘hotspots’

The available literature exploring the location of extrafamilial victimisation highlights differences in the types of, and extent to which, victimisation occurs within a school or community setting. In addition to this there is a suggestion, based on a very limited body of research, that there are likely to be specific areas in which victimisation ‘hotspots’ (identifiable geographical clusters of victimisation) occur.

Exploring criminal ‘hotspots’ on the way home from school in one district of Japan, Lee et al. (2012) carried out a survey with 357 14 and 15 year olds attending 19 schools. Using map-based exercises to identify the locations of ‘criminal spots’ and to explore the characteristics of young people’s commutes to school, they reported that 94.5% of criminal victimisation occurred within 500m of the school building. They also found that the school region was the top-ranked crime occurrence region (35.7% victimisation occurring there). This included landmarks where there were apartments, along with paths located within school regions and which tended to be on the boundaries of the school property. Indeed, increased victimisation was reported in relaxation places designed for people to come together and on paths where people were known to congregate. Finally, the authors of this study found natural surveillance (i.e., guardianship) to be an important feature in the location of crime and victimisation, both of which more commonly occurred in less supervised areas. Additional research carried out in the USA by Rapp-Paglicci, Dulmus, Sowers, and Theriot (2004) also identified certain bullying hotspots within the school which were governed by less adult supervision. An example of this is school hallways which were found to be the most common bullying hotspot for girls.

The findings by Lee et al. (2012) and Rapp-Paglicci et al. (2004) suggest that extrafamilial victimisation is likely to cluster within a given setting. Knowledge of such hotspots is therefore important for improving the understanding of extrafamilial victimisation and the risk and protective factors associated with it. Specifically, hotspot analysis of crime and victimisation has become a useful tool in helping to protect people within the community. A meta-analysis of 16 studies exploring the effectiveness of geographically-based, localised, police initiatives using hotspot analysis reported that there was significantly less likely to be crime and disorder

within policed hotspots (OR= 1.39, CI= 1.22-1.59) (Bowers, Johnson, Guerette, Summers, & Poynton, 2011). Whilst there have been worries that such focussed policing may displace crime, this effect was non-significant and, instead, it resulted in significantly less crime in surrounding areas (OR=1.14, CI=1.03- 1.14). Although this type of policing has not yet been explored for its potential impact on preventing youth crime and extrafamilial victimisation, these findings suggest hotspot analysis may be beneficial in helping to reduce the community-based victimisation of children and young people.

Analysing victimisation hotspots therefore allows for research findings to be fed directly into community policing and inform supervision by parents and teachers to protect children and young people from extrafamilial victimisation. However, research into the geographical distribution of victimisation hotspots amongst young people is extremely scarce, internationally and within the UK. The current research therefore aimed to address this by using a mapping exercise to explore the geographical location of community-based extrafamilial victimisation and possible victimisation hotspots. This was explored using a case study design, sampling young people from one English town who took part in the victimisation survey within Study one.

2.5. Understanding extrafamilial victimisation within the framework of the RAT

The above research findings suggest that the type of extrafamilial victimisation experienced by children and young people differs according to location. In addition, the limited amount of research available suggests that victimisation may be concentrated in specific locations which have certain

characteristics and features. The Routine Activities Theory (RAT) of victimisation provides a framework in which to understand how location, and the activities carried out within specific locations, may impact on extrafamilial victimisation. As noted earlier, RAT suggests that victimisation is most likely to occur when young people are exposed to a motivated offender, in the absence of a guardian, and when they possess something that makes them 'attractive' to a potential offender (Miethe & Meier, 1994). As such, activities within the school, activities relating to the structure of the school day, and activities carried out within the community all have the potential to influence the presence and characteristics of extrafamilial victimisation.

2.5.1. School-related routine activities associated with exposure to victimisation in school and community environments.

Research which explores the location and timing of school-based extrafamilial victimisation is usually carried out in relation to peer assault/bullying, and little attention has been given to other types of extrafamilial victimisation. The research base in this area is therefore limited, particularly in relation to UK schools. Nevertheless, the available research findings do appear to reveal a pattern of victimisation governed primarily by the interactions between young people within the school and the level of guardianship/supervision they receive. Gender differences and the type of peer victimisation under exploration are found to be influential factors on these associations, as discussed below.

A large proportion of school-related victimisation stems from peer interactions in the course of routine daily activities, and it is suggested that minor incidents/squabbles within the school are likely to escalate as a result of this (Garofalo et al., 1987). These issues may also spill over to influence victimisation on

the journey to and from school and within the community (Mateu-Gelabert & Lune, 2003). Activities at school and on the journey to and from school may increase the risk of victimisation through a lack of, or reduction in, guardianship coupled with increased exposure to a number of people, some of whom the individual would not normally choose to spend time with. This is supported by findings such as those by Turner et al. (2011) using the NatSCEV, who found that bias attacks were particularly likely to occur within the school setting (78% of the time), possibly as a result of a wide range of cultures and ethnicities coming together in one context. Additionally, there is some evidence from the USA that the presence of delinquent young people at school, along with individuals who have antisocial characteristics and criminal associates, significantly increases the likelihood of school-based victimisation for young people in grades three to 12 (Schreck, Miller, & Gibson, 2003).

In their comparative survey of young people in Germany (1,538 young people aged eight) and England (2,377 young people aged six to eight), Wolke et al. (2001) found most school-based bullying occurred in the playground (average 93%) followed by the classroom (average 30%); as opposed to the corridor, way to/ from school, or other areas such as school toilets and changing rooms). This is supported by findings from a small Canadian observational study of school-based bullying (n= 37) by Craig, Pepler, and Atlas (2000). With regards to the timing of school-based peer victimisation, a USA survey of 150 14-16 year old pupils also found that 43% of victimisation occurred during the lunch break, 37% during class, 16% in a passing period between classes, and 3.5% before school (Nishina & Bellmore, 2009). These findings suggest that most school-based peer victimisation occurs at a time and place when supervision levels are at their lowest, in line with the RAT.

However, gender effects have been noted, with significantly more females found to be victimised in the classroom compared to males (37.5% females, 27.5% males; Wolke et al., 2001). Additionally, the type of bullying being explored was found to be influential, with more direct victimisation occurring in the playground and more indirect victimisation occurring in the classroom (Wolke et al., 2001). These findings suggest that the type and dynamics of extrafamilial victimisation are associated with the locations in which it is most likely to occur in school. This appears, to some extent, to be related to the level of guardianship offered in school-based locations; more covert forms of victimisation appear to be more prevalent in locations where there is increased guardianship, whilst more overt forms of victimisation occur more in places with less guardianship.

Routine activities relating to school attendance and the school day also appear to have an impact on the rate and type of victimisation experienced by young people. Soulé et al. (2008) found young people in the USA to be more at risk of serious violent victimisation (aggravated assault (20%) and being threatened with a beating (15.2%)) after school hours, between 3-6pm, whilst robbery (35.2%) and 'simple assault offences' (40.3%) were highest during school hours. This is supported, in part, by the research findings from the FBI's National Incident-Based Reporting System (NIBRS) for 2000 and 2001 (Snyder & Sickmund, 2006), whereby violent crimes towards young people were found to be highest between 3-4pm on weekdays. As the number of families with two working parents has increased, it has been suggested that the majority of 'Western countries' have seen an increase in the proportion of children and young people home alone between 3-6pm since the 1960s (Felson & Gottfredson, 1984). Consequently, young people are more likely to travel home from school by themselves and return to an unsupervised household. This may

account for the apparent peak in extrafamilial victimisation experienced by young people in the hours immediately after school. These findings therefore support elements of the RAT in relation to guardianship and exposure to crime and motivated offenders. However, these specific relationships are largely speculative at present due to a dearth of research in this area.

Participation in after-school clubs could reduce the impact of low supervision and exposure to crime and offenders for young people in the hours immediately after school. According to RAT, young people should face a lower risk of victimisation if they spend more time in structured, supervised activities immediately before or after school (Reese, Vera, Simon, & Ikeda, 2000). Literature reviews in this area generally report a positive association between extracurricular activities and adolescent development (see, for example, Feldman & Matjasko, 2005), including lower substance use, less sexual activity, better psychosocial adjustment, and reduced delinquency. However, this relationship is not straightforward. In a review of the literature by Feldman and Matjasko (2005), influential gender differences were noted and mediating and moderating variables were identified, including the role of the peer group. Additionally, the type of activity engaged in appears to be important and, in some cases, has been found to increase the young person's risk of victimisation. In one large USA study ($N= 10,438$ 10th grade pupils from 1,221 schools) increased involvement in classroom-related activities, school clubs and intra-mural (within school) sporting events significantly increased the risk of violent and property victimisation by 10.9% for every unit increase in one of these activities (Peguero, 2009). However, there was a significant negative relationship between the risk of violent victimisation in school and interscholastic (conducted between or among schools) sports involvement, with a 9% decrease in victimisation for every

unit increase in involvement in interscholastic sport. One theory as to the influence of type of activity is the possibility that young people who attend more classroom based, intellectual activities are seen as more vulnerable. Indeed, 'smart' children may be more likely to be seen as an easy target compared those who play sport and who therefore may be perceived to have higher social status, strength, and a greater ability to protect themselves (see Peguero, 2009).

Another factor which may influence the success of after-school clubs and structured, supervised activities on the reduction of extrafamilial victimisation is whether they attract the types of children most in need of structured activities. Using a sample of 417 young people attending five underperforming middle schools in the USA, Cross, Gottfredson, Wilson, Rorie, and Connell (2009) randomly assigned students to a control group or invited them to attend a 3-day per week, 3 hours per-day afterschool club programme during one school year. The findings showed that unstructured socialising significantly increased the odds of substance use by 18% and involvement in delinquent acts by 10% and after-school club attendance significantly reduced unsupervised socialising by one half-day a week. However, there was not enough power within the study to suggest that supervised activities reduced substance use and delinquent behaviour, and they did not attract the most delinquent-prone youths receiving the least amount of supervision from parents/carers. After-school clubs may therefore be ineffective in protecting those young people most vulnerable to offending or victimisation. Additionally, other research in Finland (with 13,459 12-13 and 15-16 year olds) has concluded that the period immediately after-school is not a significant risk for extrafamilial victimisation and therefore after-school activities will be unlikely to directly impact on victimisation (Felson et al., 2013). This was based on the finding that victimisation within the

community was highly associated with alcohol use, a behaviour which is less likely to occur straight after school than later in the evening (Felson et al., 2013).

It is important that further work is carried out in this area, particularly within the UK, to explore the role of after-school activities on young people's risk of extrafamilial victimisation. Additional exploration of how young people travel home from these activities is also needed as this may be an important factor in the relationship. Finally, information on before-school activities is absent in the research and attention to these activities may benefit our understanding of the timing and location of extrafamilial victimisation.

The above research findings provide a body of evidence to support the suggestion that guardianship and school-related routine activities have an impact on young people's exposure to extrafamilial victimisation. Nevertheless, our knowledge and understanding is limited and relies heavily on USA-based research. It is important that further research is carried out in the UK which explores the location and timing of victimisation within the school and the relationship this may have with levels of guardianship. Further exploration of the impact of guardianship in the hours immediately after school is also important, as is research on the impact of before- and after-school activities. As such, the current research aimed to gain information on the location and timing of school-based victimisation explored within the English victimisation survey carried out. This would further increase efforts to help prevent specific types of victimisation occurring within the school, directing them to the locations in which this is most needed. It also aimed to explore the association between extrafamilial victimisation and participation in before- and after-school activities and guardianship immediately after school. In doing so, the

aim was to identify possible areas in which prevention could be focussed to reduce extrafamilial victimisation after school.

2.5.2. Extrafamilial victimisation on the journey to and from school

An additional part of the school day which has the potential to influence the extrafamilial victimisation of children and young people is their journey to and from school. Early research from the USA suggests that around one third of the victimisation against young people occurred on the street, 23% of which was on the journey to or from school, including the school bus (Garofalo, Siegel, & Laub, 1987). This was based on National Crime Survey data with 373 young people aged 12 to 17. In addition, the most serious offences were said to occur on these journeys whilst less serious incidents occurred in more supervised settings. Similar findings were also reported in the USA (Raskauskas, 2010) whereby 20.9% of fourth and fifth grade students were victimised by peers on the journey to and from school, with more than a quarter (27.8%) of this on the school bus (note that this study used a small sample; $N= 86$). These findings suggest that a fairly large proportion of the extrafamilial victimisation experienced by children and young people in the USA occurs on the journey to or from school. In contrast, one study in England (Wolke et al., 2001) reported that only 2%-3% of the 2,377 children surveyed (aged six and eight) reported peer victimisation on the journey to and from school. Additionally, research by MORI (2004) in the UK found that threatening behaviour, bullying, physical attacks and theft were more likely to occur at school (54%, 79%, 43%, 39%, respectively) for young people in mainstream education ($N= 4,715$ 11-16 year olds) compared to the journey to or from school, in the local community, or elsewhere. Further research therefore needs to be carried out in this area to explore

whether this contrast in findings reflects cultural differences in the location and timing of extrafamilial victimisation.

Raskauskas (2010) investigated the type of victimisation experienced on the journey to or from school. They reported that the majority of the peer victimisation experienced by the 86 participants in their USA survey was verbal victimisation (54.5%), followed by physical victimisation (27.8%) and relational aggression (16.7%). Looking specifically at bullying on the school bus, video analysis by Raskauskas (2005) revealed that approximately two incidents of bullying occurred per bus ride, and suggested the severity and frequency of victimisation experienced was significantly positively associated with the number of young people on the bus. The presence of friends on the bus, however, was not found to significantly protect young people against this form of bullying.

Other research exploring the characteristics of the young person's journey to and from school on their risk of victimisation has been carried out in Japan. Lee, Ryu, and Ha (2012) identified gender differences within the analysis of their survey of 357 14 and 15 year olds, reporting that young males faced the highest risk of victimisation on these journeys (mean victimisations= 0.10, SD=0.33) compared to females (mean victimisations =0.06, SD=0.24; the difference was not statistically significant and the timeframe for victimisation was not defined). The duration of the journey and mode of transport used (walked or cycled) did not have a significant impact on the prevalence of victimisation despite the young people who cycled and whose journeys took less than 15 minutes reporting a significantly greater sense of safety. Preliminary research findings therefore suggest that victimisation on the journey to and from school may be influenced by gender, whilst the characteristics of these journeys have not yet been identified as strong risk factors for victimisation.

There is limited research in the UK exploring the relationship between journey to and from school and extrafamilial victimisation. In particular, there is a dearth of research, both locally and internationally, on the risk factors relating to the characteristics of the journeys made. The current research therefore investigated the prevalence of extrafamilial victimisation occurring on the journey to and from school within the English-based victimisation prevalence survey carried out in Study one. In addition, the characteristics of the journeys travelled were explored with the aim of identifying associated factors which may make victimisation more or less likely to occur. This research is important in order to provide a greater understanding as to how much victimisation occurs on the journey to and from school and the characteristics associated with its occurrence. Doing so may help to identify preventative strategies to reduce/ prevent victimisation.

2.5.3. Routine activities within the community and exposure to community-based victimisation.

The above research suggests that the level of guardianship young people receive at school, and their routine activities in relation to the school day, are likely to impact on their vulnerability to, and experiences of, extrafamilial victimisation. In line with RAT, additional research also suggests that the routine activities carried out by young people within the community have an impact on their likelihood of being victimised outside of the school.

Felson, Savolainen, Berg, and Ellonen (2013) explored the routine factors which may increase the risk of assault and robbery in the community for a sample of 13,459 Finnish 12-13 and 15-16 year olds. They found that an active night-life (after 6pm) significantly increases the risk of males becoming a victim (assault OR= 1.30,

robbery= 1.44, amount of 'spuriousness' in relationship= 29.7% and 26.9%, respectively)), whilst the relationship for females is spurious (assault OR= 1.47, robbery OR= 1.73, amount of 'spuriousness' in relationship= 87.8% and 69.9%, respectively) and more due to chance. This is because active night life equally predicted assault and robbery victimisation at home or the school for girls and was not specific to victimisation in the community.

Research from Japan suggests that the majority of street crime against children happens when they are alone in the community (see Komiya, 2011) and other USA research has found young people to be more at risk of victimisation by strangers and people known to the young person if they frequent public places (Sparks, 1982). Much of this risk has been linked to alcohol however (particularly for males), which has been found to significantly mediate the relationship between 'night life' and extrafamilial victimisation (Felson et al., 2013). In addition, Vézina et al. (2011) carried out a survey with 541 15 year old 'high risk' girls in Canada to explore their experiences of dating violence. They found that a risky lifestyle, which included alcohol, drugs, delinquent activity and risky sexual practices, significantly increased the odds of psychological dating violence (OR= 2.11, 95% CI= 1.37–3.24) and physical/sexual dating violence (OR=1.83, 95% CI= 1.09–3.07). They also found risky lifestyles to partially mediate the relationship between affiliation with deviant peers and psychological dating violence, and completely mediated the relationship between affiliation with deviant peers and physical/sexual dating violence. Indeed, Eaton, Davis, Barrios, Brener, and Noonan (2007) found that the odds of dating victimisation increased as the numbers of risky behaviours increased in their survey of 15,214 US high school students. For females, the odds of dating victimisation when they engaged in four risky behaviours was 15.29 times greater

(95% CI = 6.79, 34.42) than someone who engaged in no risky behaviours, and for males the odds were 8.65 greater (95% CI = 4.41, 16.95).

The link with alcohol and risky activities has been associated with the intoxicated young person's suggested weakened inability to defend themselves, as well as being linked to the places they frequent (Sparks, 1982). It has also been suggested that young people under the influence of alcohol face an increased likelihood of provoking potential offenders (Felson et al., 2013). Additionally, delinquency has been linked to extrafamilial victimisation in many research studies (Nofziger, 2009; Taylor, Freng, Esbensen, & Peterson, 2008; Vézina et al., 2011). Using RAT to explain this relationship, delinquent acts are likely to increase the exposure of young people to other delinquent young people, thus placing them within situations and activities where victimisation is more likely and their 'attractiveness' as a victim increases.

These findings provide evidence to support the RAT in that the young person's activities in the community and an associated lack of guardianship appears to increase their exposure and attractiveness to potential offenders, making them more at risk of victimisation. However, further research is needed in this area to explore these relationships in more detail and to provide greater support for this theory. Specifically, there is very little UK-based research on the relationship between extrafamilial victimisation, routine activities, alcohol use, and guardianship on an evening, as well as the impact of time spent with friends and the activities young people engage in while out with friends. It is therefore vital that further research takes place to explore these risk factors in more detail to help improve our understanding and ability to respond appropriately.

To work towards addressing this gap in the literature, the research carried out in Study one explored young people's levels of guardianship in the evening, alcohol use, delinquency and friends' delinquency, and activities carried out with friends in the evenings after school in relation to the extent of their community-based extrafamilial victimisation. Doing so allowed for further exploration of these issues within England specifically, and provides further evidence for or against elements of the RAT of extrafamilial victimisation. As such, this increases our understanding of this area and may facilitate the development of more targeted intervention strategies.

2.6. Risk and Protective Factors for extrafamilial Victimisation

In review of the research literature outlined above, it is clear there are a number of risk and protective factors for extrafamilial victimisation relating to the activities of children and young people in the school and the community, their interactions with others in these settings, and the characteristics of the schools they attend. To build on this, it is important that we aim to understand the wider predictive factors which influence the victimisation of children and young people in the school and community. In doing so, the findings of prospective longitudinal research studies are vital to gain a sense of order and causality for these relationships.

There has been a wealth of research exploring the risk factors for extrafamilial victimisation and, to a much lesser extent, protective factors against extrafamilial victimisation. These risk and protective factors can be broadly separated into individual and contextual factors, between which there is usually an interaction; it is rare that they operate in isolation (Kochenderfer-Ladd, Ladd, & Kochel, 2009; Perry et al., 2001). When reviewing this research, the Ecological

Systems Theory provides a useful way of organising the research findings into a structure that can facilitate our understanding, ranging from the more proximal factors to the young person (individual factors) to more distal, contextual factors.

2.6.1. Risk factors

A number of static and dynamic risk factors for extrafamilial victimisation have been identified in the research literature, yet the research findings regarding the impact and strength of many of these are inconsistent and contradictory. For example, Perry et al. (2001) cite the debate surrounding the impact of physical characteristics on the risk of being victimised. Additionally, Kochenderfer-Ladd et al. (2009) briefly review the research on sex differences in the extent and type of victimisation experienced, concluding that the findings are mixed. To synthesise the vast amount of literature in this area, three systematic literature reviews and meta-analyses have been carried out.

Cook et al. (2010) carried out a meta-analytic investigation of 153 cross-sectional and longitudinal research studies exploring predictors of bullying and victimisation in childhood. Grouping risk factors into categories, 'peer status' ($r = -.35$) and 'social competence' ($r = -.30$) were the strongest individual predictors whilst 'school climate' ($r = -.16$) and community factors ($r = -.15$) were the strongest contextual predictors. Including only longitudinal studies, Reijntjes, Kamphuis, Prinzie and Telch, (2010) carried out a meta-analysis synthesising research findings from 18 studies on the bi-directional relationship between peer victimisation and internalizing problems. They report a symmetrical bi-directional relationship between peer victimisation and internalising problems. Effect sizes suggested victimisation was a stronger predictor of internalising problems than the other way

around ($r = .18$ (95% CI= 0.12- 0.24) Vs. $r = .08$ (95% CI= 0.01- 0.16)) but this difference was not significant when using a random effects model. In another meta-analysis of 11 studies, odds ratios showed that disabled children face a 3.68 (95% CI= 2.56- 5.29) greater risk than non-disabled peers of being exposed to some form of violence (Jones et al., 2012). The authors of the review noted problems in the way violence is defined within the literature, however, and a greater focus on child maltreatment than extrafamilial victimisation.

Together, the findings from these reviews suggest that a range of individual factors, those operating at the microsystem, and those operating at the exosystem act as significant risk factors for extrafamilial victimisation. They have been useful in drawing together findings from the literature and have highlighted complex cyclical relationships between the risk factors for, and the outcome of, extrafamilial victimisation. They have also highlighted heterogeneity in study design and the quality of the research in this area. However, these reviews focus mainly on peer victimisation and there appears to have been no systematic attempt to comprehensively review the literature on all types of extrafamilial victimisation (particularly violent victimisation). It is therefore unclear as to whether the same risk and protective factors operate for all forms of extrafamilial victimisation, or whether peer victimisation is a distinct sub-group. Within these reviews, risk factors have been categorised and the importance of different categories of risk factors (e.g., 'peer relationships') has been addressed. Whilst this is useful, it removes focus from the predictive ability of specific risk factors which may be more amenable to intervention (such as 'peer isolation', 'peer group status', etc.).

2.6.2. Protective factors

In contrast to the amount of research investigating risk factors, protective factors have been largely overlooked and there has been no systematic attempt to synthesise current findings. Protective factors have often been identified as a by-product of research exploring the risk of extrafamilial victimisation, yet a small number of studies have focussed on protective factors, revealing important findings. Hodges, Boivin, Vitaro, and Bukowski (1999) for example found that having a mutual friend and having a protective friend significantly negatively correlated with peer victimisation one year later ($r = -.28$, and $r = -.12$, respectively, based on a longitudinal survey of 393 American school children). Additionally, a longitudinal survey of 1,196 American 12-15 year olds reported that community violence was significantly less likely amongst young people living in neighbourhoods which offer a greater, versus lesser, variety of youth organizations (Gardner & Brooks-Gunn, 2009). Findings such as these offer insight into ways of helping to protect young people against extrafamilial victimisation, yet there are few studies in this area which have focussed on this.

2.6.3. Mediating and moderating variables

The influence of a risk or protective factor often depends on the presence or absence of other factors (mediating variables) and the degree of exposure to the predictor, or its interaction with other variables (moderating variables). Additive models of risk suggest it is a combination of child and environment-level factors which create increased risk, over and above the impact of just one of those factors on their own (Kochenderfer-Ladd, Ladd, & Kochel, 2009). Indeed, Routine Activities Theory (Schreck & Fisher, 2004) and the Ecological Systems Analysis

Model (Honge & Espelage, 2012) highlight the interaction between the young person's characteristics and environmental and offender characteristics in their theories of extrafamilial victimisation.

In a non-systematic review of the literature, Buka, Stichick, Birdthistle, and Earls (2001) cite age, gender, caregiver demographics, family structure, school characteristics and peer relationships as important moderators on the relationship between risk factors and witnessing violence. Additionally, age was noted as moderating internalising behaviour in the meta-analysis by Cook et al. (2010) outlined above. Nevertheless, mediating and moderating variables are not routinely explored in the literature and there has been no systematic attempt to review the current findings. This means our understanding of the complex relationship between risk and protective factors is limited and hinders attempts to develop effective prevention and intervention strategies.

In summary, the research in this area has placed a greater amount of emphasis on risk factors for extrafamilial victimisation than protective factors and factors which may mediate or moderate risk. The systematic reviews and meta-analyses that have been carried out to synthesise the research literature on risk factors also have a number of shortcomings, as outlined above. Study two of this thesis therefore comprised of a large systematic review which aimed to synthesise research findings on the risk and protective factors for extrafamilial victimisation alongside the mediating and moderating factors that have been explored. In doing so, only prospective longitudinal studies were included to allow for an estimation of causality. This was driven by the goal of gaining a better understanding of the risk and protective factors and the ways they may be targeted through intervention. A

secondary aim of the review was to explore the quality of the literature in this area to highlight common areas of bias and to provide guidance for the development of future research.

2.7. Impact of Extrafamilial Victimisation on the Psychological Well-Being of Young People

The research outlined throughout this chapter suggests young people are at risk of being harmed in a number of ways within the school and community environments. As such, it is important to establish the impact this may have on young people to be able to help them overcome their experiences.

It is difficult to isolate the impact of extrafamilial victimisation due to the overlap between familial, school-based, and community-based victimisation (Aisenberg & Herrenkohl, 2008). Nevertheless, there is a wealth of research highlighting the short-term and (to a lesser extent) long-term effects of extrafamilial victimisation on children and young people. Recent reviews and meta-analyses of the longitudinal and cross-sectional research literature identified significant relationships between extrafamilial victimisation and: internalising problems ($r = .18$, 95% CI= 0.12- 0.24) (Reijntjes, Kamphuis, Prinzie, & Telch, 2010); psychosomatic problems (OR= 2.00, 95% CI= 1.70- 2.35) (Gini & Pozzoli, 2009); aggression (McDonald & Richmond, 2008); anti-social behaviour ($d = .55$) (Wilson, Smith Stover, & Berkowitz, 2009); lower academic achievement ($r = -.12$, 95% CI= $-.15$ - $-.09$) (Nakamoto & Schwartz, 2010); and substance abuse and delinquency (Lynch, 2003).

Additionally, young people within the DVS were been found to be two to three times more likely to experience subsequent victimisation throughout childhood

and into adulthood following initial exposure (Finkelhor, 2008; Finkelhor et al., 2007b). Indeed, recent research findings have noted a reciprocal relationship between extrafamilial victimisation and outcome, whereby some variables have been noted as risk factors for, and the outcome of, extrafamilial victimisation. This includes: internalising problems (Reijntjes et al., 2010), aggression (Malti, Perren, & Buchmann, 2010) and offending behaviour (Smith & Ecob, 2007). As such, a better understanding of the impact of extrafamilial victimisation will help inform interventions to improve outcomes for children and young people, whilst reducing the likelihood of revictimisation.

A number of the outcomes associated with extrafamilial victimisation relate to the psychological well-being of the young person (e.g., internalising problems, aggression, psychosomatic symptoms). This relationship is important because research findings indicate that the young person's mental state has the potential to influence a number of areas within their life and their future development. For example, psychological distress was found to mediate the relationship between physical abuse (estimated effect = .52, bias-corrected 95% CI = .02- .77) and psychological abuse (estimated effect = .85, bias-corrected 95% CI = .30-.97), and suicidal ideation (based on interviews of 740 young people between the ages of 14 and 16 in the USA) (Thompson, Proctor, et al., 2012). Additionally, exposure to violence has been found to have a detrimental impact on physical health in a review of studies carried out by Wilson, Kliewer, and Sica (2004), as was academic functioning in a cross-sectional survey of 237 elementary school children in the USA (Schwartz & Gorman, 2003). In both studies, the relationship was mediated through psychosocial (mental health) mechanisms. The remainder of this literature

review therefore focuses on the relationship between extrafamilial victimisation and psychological well-being.

2.7.1. Impact of different types and categories of extrafamilial victimisation.

There is research to suggest that specific types and categories of victimisation have a more significant impact on the young person than others (e.g., Howard, Feigelman, Li, Cross, & Rachuba, 2002; Ortega et al., 2012; Turner, Finkelhor, & Ormrod, 2010). For example, Ortega et al. (2012), in a survey of 5862 secondary school pupils in Italy, England and Spain, found that the proportion of young people reporting negative emotions as a result of cyberbullying over the internet was lower than in direct bullying (e.g., face-to-face bullying); 18% reported being 'not bothered' by their direct bullying experience compared to 31.5% of the cyberbullied young people. Even within a specific type of victimisation, Ortega et al. (2012) also found variation in the way the young person is victimised to be influential on outcome (e.g., mobile phone-based cyberbullying was found to have more of an emotional impact than internet-based cyberbullying). This highlights the importance of recognising the type of victimisation being explored when assessing its impact on the young person. It also suggests that the outcome of victimisation will not be the same for each young person and shows how victimisation characteristics may be influential.

2.7.2. Impact of poly-victimisation.

There has been increasing interest in the impact of poly-victimisation on the well-being of young people. Experiencing multiple types of victimisation has been found to have the most significant detrimental impact on the young person compared

to experiencing a single type of victimisation (e.g., (Lynch, 2003). In their longitudinal DVS assessing the impact of poly-victimisation, Finkelhor, Ormrod and Turner (2009b) found a strong positive association ($r = .46$) between the number of different victimisation incidents experienced and subsequent mental health symptoms. Similar findings were also reported in a longitudinal survey of 8224 young people aged 12-18 by Boynton-Jarrett, Ryan, Berkman, and Wright (2008). They found that young people with five or more exposures to violence reported 4.63 times (95% CI= 3.06–6.99) poorer self-rated health than those with no violence exposure. For every additional exposure to violence in this study, the risk of poor health increased by 38%. Research findings by (Finkelhor, Ormrod, Turner, & Hamby, 2005a) using the DVS have also shown how controlling for poly-victimisation significantly reduces or eliminates the statistical significance of the relationship between individual types of victimisation and outcome. This occurs even when assessing the impact of chronic victimisation of the same type on outcome (Finkelhor et al., 2007a).

It has therefore been suggested that it is exposure to a number of *different types* of victimisation, rather than the overall number of victimisation experiences, which accounts for its impact on the young person's psychological well-being. One explanation offered for this is that the number of different perpetrators and locations in which the child is victimised may interfere with 'normal coping', above that caused by victimisation of one kind (Finkelhor et al., 2007a). However, the research on the impact of poly-victimisation is still in its infancy and additional research is needed to explore this relationship further. This is important because the findings of previous research which do not take into account the impact of multiple or poly-

victimisation may have overestimated the relationship between victimisation and outcome.

2.7.3. Impact of victimisation experienced in multiple locations.

As the poly-victimisation literature suggests, young people who experience different types of victimisation in different locations appear to suffer more than those who are victimised just once in one location. Developments in technology mean that it is harder for young people to escape victimisation and this is likely to exacerbate its impact. Based on a survey of 1,530 11-18 year old students in New Zealand, Raskauskas (2009) Raskauskas (2010) found that the cumulative effect of bullying victimisation inside school, coupled with technology-based bullying outside of school, led to significantly more depressive symptoms than experiencing bullying through just one of these means. Turner et al. (2011), using data from the NatSCEV, also found that a combination of in-school and out-of-school victimisation accounted for significantly more of the variance in child mental health than victimisation in just one of these locations (11% of the variance was explained by in-school victimisation only, increasing to 15.5% when out-of-school victimisation was added to the model) . However, Raskauskas (2010), in a survey of 86 fourth and fifth grade students in the USA, did not find a significant difference between bullying in two locations (in school and on the journey to/from school) to have a greater impact on depression than bullying in just one of these locations, although it was found to have a greater impact on self-esteem.

These findings suggest that victimisation experienced within differing environments (exosystems) may have an additive impact on the young person compared to victimisation experienced in just one environment. However, the amount of research investigating this issue is very limited and has mainly been

carried out in the USA. Additionally, the above research findings suggest that the relationship between victimisation in multiple locations and the outcome it has on the young person is not straightforward. Specifically, different types of victimisation, differences in the outcomes explored, and the different locations within which young people are victimised appear to influence outcome. There is therefore a need for further research in the UK and elsewhere which explores the impact of the location of extrafamilial victimisation on the young person.

2.7.4. Resilience.

The importance of research on the resilience of young people against the damaging impact of extrafamilial victimisation is highlighted when noting that the majority of victims do not appear to have clinically diagnosable problems following exposure to extrafamilial victimisation (Lynch, 2003; Ortega et al., 2012), and many young people are unaffected by their victim experiences (Arseneault, Bowes, & Shakoor, 2010). Additionally, there is a great amount of variability in the outcome of victimisation and in young people's reaction to victimisation (Taylor, Sullivan, & Kliewer, 2013). It is therefore important to understand why and when some young people experience significant distress following victimisation when others do not. Doing so will allow for a greater understanding as to the importance of specific factors when designing interventions which aim to minimise victims' distress.

Resilience has been defined as the 'dynamic process of transactions within and among multiple levels of a child or young person's environment over time that influences their capacity to successfully adapt and function despite experiencing chronic stress and adversity' (Aisenberg & Herrenkohl, 2008, p. 303). This can be framed within the ecological-transactional model outlined by Lynch and Cicchetti (1998) in order to help develop our understanding of the issue. This theory suggests

that each level of the young person's ecology contains 'potentiating' (risk) and 'compensatory' (protective) factors which intervene in the relationship between victimisation and outcome. These risk and protective factors include individual characteristics, family relationships and social support. The relationship between factors on these levels is said to be interactive and indirect and, depending on their balance, can alter an individual's vulnerability to outcomes following exposure to victimisation (Morrison, 2000).

Support for this theory comes from a review by Salzinger et al. (2002) who found that risk and protective factors within each level of the ecological theory have been identified within the research as mediating or moderating the relationship between victimisation and its impact on the young person. They therefore conclude that the impact of exposure cannot be properly understood unless the environmental and personal context of victimisation is taken into account. Such protective/resiliency factors (mediating and moderating variables) include; parenting and parent support, school support, peer/social support, community and neighbourhood factors and child characteristics (see reviews by Aisenberg & Herrenkohl, 2008; Lynch, 2003; McDonald & Richmond, 2008; Salzinger et al., 2002). Gender also appears to moderate the relationship between victimisation and outcomes such as posttraumatic stress disorder (PTSD), with a significantly higher number of girls experiencing PTSD following victimisation than boys (58.9% girls compared to 44.2% boys) in a survey of 621 young adolescents (aged 11-14) in the USA by Springer and Padgett (2000). Based on this theory and the research evidence used to support it, there is an obvious need to consider possible mediating and moderating factors which protect the young person from harm following victimisation. This is within research and intervention.

Nevertheless, the findings regarding important mediating and moderating variables and the relationship between victimisation and psychological well-being are inconclusive (McDonald & Richmond, 2008), and findings appear to depend largely on the type of victimisation and outcome being assessed (Loukas & Pasch, 2013). It has also been suggested that in spite of a number of personal resources or ‘resilience’, if a young person faces difficulties in a number of settings then they are unlikely to thrive (Aisenberg & Herrenkohl, 2008). Limited research has been carried out to directly explore the factors which help to protect young people against the harmful effects of victimisation. As such, we currently have a limited understanding of the moderators of the relationship between extrafamilial victimisation and psychological well-being (Reijntjes et al., 2010) and further research is therefore needed. In particular, the role of social support in the relationship between victimisation and outcome, particularly internalising problems, has been largely under-researched. This is in spite of a wealth of literature on the importance of peer relationships on general child development (Salzinger et al., 2001), and the small amount of research outlined above which suggests it may be an important resilience factor against victimisation.

The literature outlined above presents an overview of the current research exploring the impact of extrafamilial victimisation on the well-being of the young person, linking this to the ecological-transactional model to provide a framework in which this can be understood. Specifically, the literature suggests that different types of victimisation may have a differing impact on the young person, and the extent of victimisation (poly-victimisation) and locations in which it occurs may exacerbate its psychological impact. However, limited research has been carried out in this area

and our current understanding is based mainly on research from the USA.

Additionally, there is evidence to suggest that the relationship between victimisation and psychological well-being is not straight forward and there may be a number of proximal and distal factors which help to ameliorate its impact.

The current research therefore aimed to build on the victimisation survey carried out in study one of this thesis by incorporating a survey of the young person's psychological well-being (the Trauma Symptoms Checklist for Children-Alternate form). In doing so, the aim was to explore the impact of extrafamilial victimisation on psychological well-being, considering the impact of different types of victimisation, poly-victimisation, and victimisation experienced in multiple locations (i.e., school and community environments). Additionally, social support was explored as a moderator of the relationship between extrafamilial victimisation and psychological well-being.

2.8. Aims of the Thesis

The literature presented within this chapter reveals a complex picture regarding the extrafamilial victimisation of children and young people internationally and within the UK. This is in terms of the prevalence and characteristics of victimisation, the location in which it occurs, the influence of the school and the routine activities carried out by the young person, the varying information gathered on the risk and protective factors for extrafamilial victimisation, and the impact victimisation can have on the psychological well-being of the young person. Nevertheless, there are a number of important gaps in the literature which hinder our understanding of extrafamilial victimisation within each of these areas. In particular, there is a dearth of literature carried out in the UK which means the majority of our

understanding of extrafamilial victimisation is currently based on findings from the USA. In order to address these gaps in our understanding, two large studies were carried out within this thesis.

The first is a large cross-sectional survey of English young people designed to provide a comprehensive assessment of all forms of extrafamilial victimisation. This research aimed to answer overarching research questions regarding the prevalence, characteristics and location of extrafamilial victimisation, associated factors relating to routine activities, and the impact of extrafamilial victimisation on psychological well-being.

The second study is a large systematic review (secondary empirical research) designed to synthesise the research findings from longitudinal cohort studies regarding the predictive factors for all forms of extrafamilial victimisation (excluding intimate partner violence as detailed in Chapter 6). The aims of this review were to synthesise the risk and protective factors for extrafamilial victimisation alongside the mediating and moderating variables found. It also aimed to investigate the quality of the longitudinal research in this area.

The current chapter aimed to provide an overall review of the literature which informed studies one and two. The specific aims of these two studies have therefore been outlined throughout this chapter where the gaps in the current literature have been identified. The remainder of this thesis proceeds by discussing the specific objectives, methods and results of study one (Chapters 3-5) followed by the objectives, methods and results of study two (Chapter 6). Therefore, the findings of the systematic literature review are presented after the results and discussion of the primary empirical research carried out in study one. This decision was made as a discussion of the risk and protective factors for extrafamilial victimisation prior to

the presentation and discussion of findings on the prevalence, characteristics, location, and factors associated with extrafamilial victimisation would have been premature. The systematic review is also an attempt to address the limitations associated with the cross-sectional design of study one, preventing any causal explanations as to any associations found. The systematic review therefore builds on the findings from study one by synthesising the longitudinal research literature in this area in order to provide an overall picture of the risk, protective and intervening factors for extrafamilial victimisation.

Chapter 3. Study 1: methods.

3.1. Chapter Overview: Introduction to Study One

The first study in this thesis (study one) provides one of the first, large-scale surveys exploring the extrafamilial victim experiences of young people ($N = 730$ from eight mainstream secondary schools) within one county in England. This study also incorporated one smaller case study of young people ($N = 214$) attending one of three secondary schools in one English town. This study adopts a holistic approach to the investigation of extrafamilial victimisation in order to gain a comprehensive understanding of its prevalence, characteristics, associated social factors relating to the young person's routine activities, and its impact on psychological well-being.

The current chapter details the project management of this large empirical research study, starting by describing its objectives and hypotheses. The two pilot studies carried out to develop and test the design and procedures for this study are then outlined. The recruitment of participants is described, along with the procedure, ethics and safeguarding.

3.2. Research objectives and hypotheses

The aims of study one have been outlined throughout chapter 2 and the specific objectives of these aims are outlined in Table 2 below alongside the associated hypotheses.

Table 2. Aims, Objectives and Hypotheses of Study One

Aim	Objective	Hypothesis
<p>1. To explore the prevalence, and characteristics of all forms of extrafamilial victimisation amongst a large sample of English young people using a survey design.</p>	<p>1.1. To investigate the prevalence of extrafamilial victimisation amongst a large sample of English young people.</p>	<p>a) Based on the previous research in this area it was hypothesised that the vast majority of participants would have experienced extrafamilial victimisation.</p> <p>b) Victimisation would vary according to gender; young males were predicted to have experienced more physical forms of victimisation and females were predicted to have experienced greater levels of relational, sexual, and dating victimisation.</p>
	<p>1.2. To explore the characteristics of the perpetrators of extrafamilial victimisation towards young people in England.</p>	<p>a) There is little research on perpetrator characteristics within this area on which to form a hypothesis. Nevertheless, it was anticipated that most perpetrators would be the same age or older than the victim. It was also hypothesised that categories of victimisation which we most commonly associate as being perpetrated mostly by members of the same gender (e.g., bullying, physical violence) and opposite gender (e.g., sexual and dating violence) would reveal these gender patterns in the current data.</p>
<p>2. To investigate the prevalence of</p>	<p>2.1. To investigate the prevalence of</p>	<p>a) It was hypothesised that the majority of young people would</p>

<p>poly-victimisation and explore the differences between them and non-poly-victims.</p>	<p>PY and LT poly-victimisation using established classification criteria (Finkelhor et al., 2007a; Finkelhor, Ormrod, & Turner, 2009b).</p>	<p>have been victimised more than once and that a small subsection of young people would be classed as PY and LT poly-victims.</p>
	<p>2.2. To explore differences between young people classed as a PY or LT poly-victim and those classed as a PY or LT lower-level victim (i.e., non-poly-victim), and the types of victimisation they have been exposed to.</p>	<p>a) It was hypothesised that PY or LT poly-victims would be less likely to come from intact, two-parent households than lower-level PY or LT victims. b) Poly-victims were hypothesised to be more prevalent amongst those young people who had experienced more serious forms of victimisation than lower-level victims.</p>
<p>3. To investigate the location and timing of each type and category of victimisation.</p>	<p>3.1. To investigate the location (school or community) of each type and category of victimisation.</p>	<p>a) It was hypothesised that young people would be victimised at similar levels within the school and the community. b) More ‘serious’ forms of victimisation (e.g., sexual victimisation and dating violence) were predicted to occur within the community, whilst other forms of ‘lower-level’ victimisation, such as bullying, were predicted to occur more often within the school.</p>

	<p>3.2. To investigate the location and timing of victimisation occurring in the school and in the community.</p>	<p>a) School-based victimisation was hypothesised to be the most prevalent at time periods (e.g., lunch break) and locations (e.g., school field), during which young people received the least supervision.</p> <p>b) Community-based victimisation was predicted to occur most often on evenings and weekends within outdoor spaces. This is where less protection/supervision from suitable guardians could be expected.</p> <p>c) It was hypothesised that there would be differences in the findings based on the type and category of victimisation being explored.</p>
	<p>3.3. To investigate the amount of victimisation occurring on the journey to and from school.</p>	<p>a) It was hypothesised that a minority of victimisation would occur on the journey to and from school, based on the current UK literature.</p>
<p>4. To explore the geographical location of community-based extrafamilial victimisation and possible victimisation hotspots.</p>	<p>4.1. To use a mapping exercise embedded within a case study to visually explore the geography of community-based victimisation within one UK town, using data</p>	<p>a) The limited Japanese research suggests that distinct victimisation hotspots can be identified within the community and, in particular, around the school premises (Lee et al., 2012). It was therefore hypothesised that clusters of victimisation (i.e., ‘hotspots’) would be identified within this</p>

	from young people attending all three secondary schools within the town.	town.
	4.2. To explore the distribution of victimisation for pupils attending each of the three schools, and to identify whether there were different patterns of victimisation based on the school the young person attended.	a) Drawing upon RAT and the preliminary research findings from Japan (Lee et al., 2012), greater amounts of victimisation were anticipated within close proximity to the three schools for the young people who attended them. Additionally, differences in the location of victimisation were anticipated for the young people attending each school.
5. To explore the association between extrafamilial victimisation and young people's activities and guardianship immediately after school.	5.1. To explore the association between extrafamilial victimisation and participation in before- and after-school activities and guardianship immediately after school.	a) Based on the current literature it was hypothesised that guardianship immediately after school and participation in after-school activities would reduce the prevalence of victimisation in the community.
6. To investigate the characteristics of the journeys travelled to and from school in	6.1. To explore the relationship between the characteristics of the young person's journey to and from	a) Based on the literature carried out so far, it was hypothesised that the characteristics of the journeys made would have little impact on victimisation on this journey.

<p>order to identify associated factors which may make victimisation more or less likely to occur.</p>	<p>school and journey-based victimisation.</p>	
<p>7. To explore whether the activities young people engage in with their friends and the amount of time spent with friends increases the young person's risk of extrafamilial victimisation in the community.</p>	<p>7.1. To explore the relationship between young people's levels of guardianship in the evening, alcohol use, delinquency and friends' delinquency, time spent with friends on evenings and weekends and activities carried out with friends and the extent of their community-based extrafamilial victimisation.</p>	<p>a) Young people associating with friends who engaged in delinquent behaviour, and young people who were in trouble with the police themselves, would have a higher prevalence of community-based extrafamilial victimisation.</p> <p>b) Young people who spent more time with their friends, spent more time doing unstructured, unsupervised activities, and drank alcohol with friends would have a higher prevalence of community-based extrafamilial victimisation.</p> <p>c) Young people who reported that their parents displayed a lower-level of guardianship over the young person's whereabouts on an evening would have a higher prevalence of community-based extrafamilial victimisation.</p>
<p>8. To further investigate the relationship between extrafamilial victimisation and psychological well-being.</p>	<p>8.1. To investigate the impact of exposure to different categories of extrafamilial victimisation on the psychological well-being of young</p>	<p>a) Each category of victimisation was hypothesised to be related to psychological well-being, yet more 'serious' categories of victimisation (e.g., sexual victimisation) were hypothesised to have a stronger relationship than 'less serious' categories of</p>

	people.	victimisation (e.g., property victimisation).
	8.2. To investigate the impact of PY and LT poly-victimisation on the psychological well-being of young people and explore how this changes the relationship between victimisation and outcome.	a) PY and LT poly-victimisation were hypothesised to be significant predictors of psychological well-being. Additionally, a large proportion of the relationship between different categories of extrafamilial victimisation and psychological well-being was hypothesised to be accounted for by PY and LT poly-victimisation.
	8.3. To explore whether the experience of victimisation in more than one location (i.e., the school <i>and</i> the community) would have an increased impact on the psychological well-being of young people.	a) Those young people who had been exposed to victimisation in more than one location were hypothesised to experience more trauma symptoms than those young people who had been victimised in just one location.
	8.4. To explore the potential moderating role of the young person's social support on the relationship between extrafamilial	a) It was hypothesised that higher levels of social support would be associated with lower levels of trauma symptoms following extrafamilial victimisation, therefore moderating this relationship.

	victimisation and psychological well-being.	
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3.3. Pilot studies 1 and 2: Development and Design of the Questionnaires, Mapping Exercise and Procedure

Two independent pilot studies were conducted in relation to study one. The aims of these were to test the usability and effectiveness of the planned research measures and procedure. To achieve these aims, the objectives were to explore young people's ability to independently complete each measure, to test the research procedure, and to understand where issues may arise with the materials and procedure.

The Co-ordination Action on Human Rights Violations (CAHRV; Martinez et al., 2007) have developed guidelines and standards of good practice for collecting data on interpersonal violence. When designing this study, these guidelines were followed as closely as possible within the practical constraints of the research.

3.3.1. Pilot study 1.

The first pilot study was conducted on the 22nd July, 2010, with one class of year 7 pupils ($N = 27$) in one of the participating UK secondary schools. A younger age group was used than the age group identified for the main research (years 9 and 10) to test the suitability of the documents amongst the lower-ability pupils. The pilot session was held during a school PSHE (personal, social, health, and economic education) lesson which lasted 75 minutes. Prior to this, the project contact within the school was asked to discuss the documents with their colleagues (teachers) for feedback. As a result of this, one question in the victimisation questionnaire (witnessed murder) was removed due to concerns over sensitivity. No further changes were recommended for any of the other materials.

3.3.1.1. Consent.

Information and consent letters were sent out to parents approximately one week prior to the pilot study and only one parent chose to remove their child (passive consent). Active verbal consent was gained from pupils at the start of the lesson and all young people agreed to take part. Pupils were informed that their data would not be used in the final study and that they could withdraw at any time.

3.3.1.2. Materials.

Pupils were each given an envelope which contained:

1. A victimisation questionnaire booklet (victimisation questionnaire).
2. Brief questions on their journey to and from school (journey questionnaire).
3. An A3 map showing their school and the surrounding 1.5 mile radius (mapping exercise).
4. Instructions on how to complete the mapping exercises.
5. A list of the victimisation screener questions to aid recall for the second mapping exercise.

Two small booklets were also given to pupils to take away from the session: one contained information on local and national help and advice services (Appendix 2); the other offered advice on how pupils could keep themselves safe in the school and the community (Appendix 3).

3.3.1.3. Procedure.

Pupils were asked to work individually, respecting the privacy of their peers, to complete each document in the order specified by the researcher. Verbal instructions were first given on how to fill out the victimisation questionnaire and then the journey questionnaire. When pupils had completed these two documents,

instructions were given for the mapping exercises. At the end of the session, pupils were asked if they had any questions and verbal feedback was gathered. Pupils' engagement in the tasks, the ease with which they were able to complete them, and any questions that they had were noted during the session by the researcher.

3.3.1.4. Results.

Privacy did not appear to be an issue within the classroom and all pupils appeared to be very engaged in the session, completing all documents in the allotted time (total duration 55 minutes). However, pupils tended to become bored and restless upon completion which raised an issue to be addressed in the final project. Minor issues were identified with the victimisation questionnaire (blank pages, unanswered follow-up questions, and circling too many follow-up answers) and the journey questionnaire (pupils were unsure how to respond when more than one answer applied). These could be resolved by providing clearer instructions and adapting the wording of some of the questions within the final documents.

Piloting the mapping exercises highlighted a number of problems. The first mapping exercise required pupils to draw their journeys (in detail) to and from school if they cycled or walked, and the second asked them to indicate where they were victimised (in the community) within the last year. Pupils were given verbal and written instructions for these tasks which appeared to overwhelm them. The verbal instructions were therefore simplified which meant some elements of the task were omitted. Analysis of the completed maps revealed that the journeys to and from school were not drawn in as much detail as was required, and only two of the 18 disclosed victimisation incidents taking place outside of school were drawn on the map. In some instances, this was because the event occurred in their home, school or elsewhere (verified by information given on the victimisation

questionnaire), but for others, it could be that participants had not understood the instructions. Adaptations to these tasks were therefore required. By consulting with pupils, it was found that the map's inclusion of a 1.5 mile radius around the school was effective in capturing the journeys of 18 of the 20 pupils who walked or cycled to/from school (including where they lived).

3.3.1.5. Necessary changes to materials and procedure.

Based on the confusion caused by the first mapping exercise and the incomplete information gathered on both mapping exercises, the first exercise was discarded. Instead, the journey questionnaire was adapted to gain the required detail on the young person's journey to and from school. The second mapping exercise remained the same. Minor changes were made to the wording and instructions for the victimisation and journey questionnaires.

A safety and victimisation quiz for secondary school pupils (downloaded from the Suzy Lamplough Trust website; <http://www.suzylamplough.org/wpcms/wp-content/uploads/General-Secondary-School-Quiz.pdf>) was completed by one of the pupils who did not have parental permission to participate in the session. This was effective in keeping their attention and was therefore identified as an option to address boredom and restlessness for participants waiting for others to finish.

3.3.2. Pilot study 2.

3.3.2.1. Consent, materials and procedure.

A second pilot study was carried out (18th & 21st October, 2010) with the objective of assessing: (1) the aforementioned changes made to the procedure and measures; (2) the effectiveness of the proposed safety and victimisation workshop to

take place at the beginning of session one (designed to engage pupils in this topic); (3) the usefulness of the safety and victimisation quiz; (4) the effectiveness of collecting data over two separate sessions. The two sessions were held during PSHE lessons which each lasted 60 minutes (4 days apart) and were carried out with the first class of year 10 pupils consenting to take part in the final project ($N = 30$; see section 2.5. for a description of the methodology for the recruitment and consent procedure). This older age group was used for the second pilot study to test the measures and procedure on participants in the upper age limit of the target population.

A computer version of the victimisation questionnaire was tested in this second pilot study to explore whether it offered a less time-consuming alternative to the paper questionnaire. This was in keeping with the original design of the Juvenile Victimization Questionnaire (JVQ) (Hamby, Finkelhor, Ormrod, & Turner, 2004), and used features such as 'skip logic' to navigate the participant through the questions. The other measures and procedure for this pilot study are the same as those outlined for the final research below (see section 2.3.), the only difference was the use of a computer suite rather than a traditional classroom setting for the second session.

3.3.2.2. Results.

The safety and victimisation workshop at the beginning of the first session was found to be effective in engaging participants and encouraging them to think about the issues at hand. All pupils completed the documents in the allocated time and no problems were identified with the documents administered during the first session (Demographic Questionnaire (see section 3.5.2.1.) and the Trauma Symptoms Checklist for Children- Alternate form (TSCC-A; see section 7.3.2.1.),

nor the newly amended journey questionnaire (see section 4.3.2.1.) and mapping exercise (see section 5.3.2.1.) in the second session.

However, substantial issues were identified by the researcher with the online victimisation questionnaire in the second session. The main problem was privacy, with the position of computer screens preventing participants from shielding their answers from others. The second issue was the use of 'skip logic' which some of the participants became aware of and were seen to change their answer to a screener question from 'yes' to 'no' to avoid follow-up questions. The paper version of the questionnaire was therefore selected for the final study.

The Safety and Victimization quiz was given to pupils when they completed all of the documents and this was found to be effective in keeping their attention until the end of the lesson. This was therefore used in the final research project.

Based on the findings of the second pilot study, the planned procedure and amended measures were deemed suitable for use with the target population and to gain the information required to meet the research aims.

3.4. Measures Used in the Final Research

Five self-report ('ipsative') measures (four questionnaires and one mapping exercise) were used in the final research. The young person was considered the 'optimal informant' to report on internal states such as psychological functioning and feelings (Holmbeck, Li, Schurman, Friedman, & Coakley, 2002). Additionally, crime and maltreatment is often concealed to others (e.g., relational victimisation, cyber victimisation, etc.) meaning that reliance on other informants may underestimate victimisation experiences (see Pellegrini, 2001). Nevertheless, the author recognises that self-report measures may be influenced by factors such as

social desirability, self-presentation and a fear of retaliation from bullies due to disclosure (Pellegrini, 2001).

3.4.1. Demographic questionnaire.

A 28-item demographic questionnaire (30 items in total, including two follow-up questions) was designed to collect information on: age, gender, ethnicity, disability, free school lunch status, family structure, quality of family relationships, parental supervision, quality of social support, time spent with friends, locations young people go to with friends, whether their friends were ever in trouble with the police, alcohol intake, and feelings of safety in and out of school (See Appendix 4). Based on the sum of the answers to the three questions exploring the young person's level of social support (SS) ('I have lots of friends', 'I have one or more friends that I can rely on when I need them', and 'Do you have one or more 'best friends'?'), a SS scale was created ($\alpha = .50$). In addition, a 'guardianship' scale was created ($\alpha = .56$) based on the sum of the answers to two questions (Do the adults you live with know where you go in the evening after school?' and 'Do the adults you live with ask where you go in the evening after school?').

3.4.1.1. Social desirability.

Embedded in the demographic questionnaire were five 'social desirability' (SD) questions taken from the lie subscale measure of defensiveness within the Culture-Free Self-Esteem Inventory- Second Edition (CFSEI-2), Form B³ (Battle, 1993). The questions are designed to identify children who are displaying defensiveness or social desirability. This is identified in cases where young people

³ The five questions from form B, instead of the 10 questions from form A, were chosen for this study for brevity.

refuse to assign to themselves valid but socially unacceptable characteristics (e.g., admitting to having ever told a lie). In doing so, these participants may present unreliable data on the study measures. The subscales on the CFSEI-2 were developed using factor analysis and the measure has been found to demonstrate good reliability and validity (Battle, 1993). Whilst the lie subscale in CFSEI-2 Form B has not been standardised, Form A (which has five additional defensiveness questions) has been standardised with males and females in grades 2 - 9 (7-15 years) in the USA and Canada.

For each SD question endorsed, one point was given and a total SD score calculated (possible range of 0-5 with a high score indicating high levels of SD). The mean SD score was 2.13 and standard deviation was 1.3 for the 811 participants who answered all 5 SD questions (out of the 893 participants who completed both sessions). On this basis, a score of 4 or 5 was considered high risk of social desirability, whilst ≤ 3 was considered within the normal distribution. As a result, 123 young people were removed from the study to improve reliability (91 scored 4 out of 5, 32 scored 5 out of 5).

The remaining 82 young people did not answer all of the SD questions, but no participant left all of the SD questions blank. In these cases, participants' individual responses were assessed and those who scored 100% on the SD questions they answered were considered to be at a high risk of socially desirable responding. A further 10 participants (six scoring four out of four, four scoring two out of two) were removed on this basis ($N = 133$ removed overall, 14.9%). Statistical comparison (chi-square) was carried out between those scoring high on SD ($N = 133$) versus low on SD ($N = 760$). This revealed how significantly less of the young people high in SD reported being in trouble with the police, drinking alcohol with

friends, being victimised etc., than young people who did not score highly on this measure (see Table 3). The removal of young people who scored high on SD from the data analysis within the present research is therefore a key strength as this will improve the reliability of the findings. This is an issue which has not been addressed in the majority of the current research carried out in this area.

Consistent with the norms for Form A of the CFSEI-2, the vast majority of participants scored low on defensiveness/social desirability (85% in this case compared to 94% of the normative CFSEI-2 sample).

Table 3

Chi-square Analysis of the Differences Between Young People who Scored High Versus Low on Social Desirability (N=893).

Variable	High SD ¹		Low SD		Chi-square ((df) χ^2 , p)
	N	(% answering yes)	N	(% answering yes)	
Friends ever in trouble with the police	20	15.0%	175	23.2%	(1) 4.43 <i>p</i> = 0.020
Young person ever in trouble with the police	6	4.7%	71	9.5%	(1) 3.18, <i>p</i> = 0.046
Never drink alcohol with friends	109	84.5%	434	58.4%	(1) 31.83, <i>p</i> = 0.000
Invalid TSCC-A due to underresponding	25	18.8%	32	4.2%	(1) 40.22, <i>p</i> = 0.000
Ever been victimised	94	70.7%	634	83.4%	(1) 12.21, <i>p</i> = 0.001
Ever been directly victimised	62	46.6%	472	62.1%	(1) 11.30, <i>p</i> = 0.001
Ever been indirectly victimised	73	54.8%	525	69.1%	(1) 10.74, <i>p</i> = 0.001

¹Scored 4 or 5 out of 5 on questions relating to social desirability or scored 100% on social desirability when there were missing answers.

3.4.2. Juvenile Victimisation Questionnaire (JVQ).

When deciding on the appropriate victimisation measure to use in this research, a number of measures were reviewed and the ‘standards specific to questionnaires about violence’ in the CAHRV report (Martinez et al., 2007, pp. 9-11) were consulted. This suggests that research should: enquire about specific actions/attempted actions instead of summarising victimisation, distinguish between forms of violence, explore the details of victimisation to allow for differentiation (e.g., between perpetrators), assess victimisation in relation to specific timeframes, review other previously designed measures, and consider potential trauma to participants.

The selected questionnaire was the Juvenile Victimisation Questionnaire (JVQ) (Finkelhor, Hamby, Ormrod, & Turner, 2005; Hamby et al., 2004). This is one of a few standardised multidimensional questionnaires which cover a comprehensive range of victim experiences. In particular, the self-report version of the questionnaire allows for further exploration of victim experiences. A research team within the National Society for the Prevention of Cruelty to Children (NSPCC) have recently adapted this questionnaire for use in the UK (Radford et al., 2011) and a consultation was held with them to create a similar measure for the current research. In doing so, the two sets of findings can provide a comparable picture of victimisation amongst young people in the UK. Additionally, the findings can be compared to national norms from the USA.

3.4.2.1. The original JVQ.

The JVQ is a 34-item questionnaire (34 screening questions) for children and young people aged 8-17 years, designed to measure 5 ‘modules’ of victimisation:

conventional crime, child maltreatment, peer and sibling victimisation, sexual assault, and witnessing and indirect victimisation. These modules have been designed to closely relate to the categories of victimisation used by child protection and law enforcement agencies. If a young person responds positively to a screening question (indicating that they have been victimised in this way), they are then asked a number of follow-up questions to explore the incident in greater detail.

The questionnaire can be administered as an interview or self-report measure for children and young people aged 12 and above (Hamby et al., 2004). Scoring the questionnaire produces a total victimisation score, module score (indicating whether a young person has experienced any form of victimisation within a module), or category score (to indicate whether the young person has experienced any type of property crime, physical assault, sexual assault or peer and sibling assault).

The wording of the questions has undergone extensive testing to maximise comprehension (Hamby et al., 2004). Its performance has been tested in a large national survey in the USA with 2,030 children (aged 2-17) and results show moderate construct validity ($r = -.02 - .31$) based on moderate but significant correlations between JVQ items and TSCC scores (anxiety, depression and anger) (Finkelhor, Hamby, et al., 2005; Hamby et al., 2004). Adequate test-retest reliability over 3-4 weeks has also been reported with Kappa coefficients (k 's) ranging in value from .22 - 1.0 (mean $k = .63$; Finkelhor, Hamby, et al., 2005). These findings should be interpreted with caution however, as 28% fewer screener items were endorsed on the second testing (meaning that less victimisation was reported on the second round of testing). Finkelhor, Hamby, et al. (2005) suggest this could be due to a lack of respondent motivation the second time around, and/or knowledge of how to shorten the questionnaire by endorsing fewer screener questions (thus avoiding having to

answer any follow-up questions). Good internal consistency ($\alpha = .80$) for participants answering all 34 screener questions has been reported (Finkelhor, Hamby, et al., 2005), whilst tests of the internal consistency of the aggregate categories of victimisation were moderate to weak. However, this is suggested to be due to the number of components (victimisation types) making up the aggregate (more components led to stronger α 's). The authors suggest that internal consistency may not be relevant to scales which measure actual life events as the domains may not be closely correlated despite still belonging in the same conceptual category.

3.4.2.2. Current adaptation of the JVQ.

The questionnaire was adapted for use with a British sample in line with the NSPCC study (Radford et al., 2011). An additional two questions on internet and mobile phone victimisation from the National Survey of Children's Exposure to Violence (NatSCEV), written by the same authors of the JVQ (Finkelhor, Turner, Ormrod, & Hamby, 2009), were also included. All of the adaptations made have been outlined below according to the module structure of the original JVQ:

1. 'Conventional crime' module: the three assault questions were combined into one question (using follow-up questions to determine use of a weapon). This module was comprised of six questions in total.
2. 'Child maltreatment' module: this was removed as it relates to intrafamilial victimisation.
3. 'Peer and sibling victimisation' module: this was adapted so that it explored only peer victimisation, thus questions relating only to sibling violence were removed. Two additional questions on internet and mobile phone based victimisation from the NatSCEV were added in and a new question on

emotional dating violence (developed by the author) was added in. This module was comprised of five questions in total.

4. 'Sexual victimisation' module: the four general sexual assault/ rape questions were condensed into one question exploring general contact sexual victimisation. A new question on internet and mobile phone based sexual harassment was added and the question on statutory rape and misconduct was removed. This module was comprised of three questions in total.
5. 'Witnessing and indirect victimisation' module: questions relating to witnessing violence in the home or by family members were removed. Questions relating to witnessed murder, witnessed shootings, terrorism and rioting, and exposure to war or ethnic conflict were removed and eight new questions on witnessed conventional crime, witnessed animal cruelty, witnessed sexual assault, and witnessed kidnap were added. This module was comprised of ten questions in total.

The current questionnaire therefore included 24 screener questions which assessed four of the five modules within the original questionnaire (conventional crime, peer victimisation, sexual victimisation, and witnessing and indirect victimisation). These can be broken down into six smaller victimisation composites within the current research: property victimisation, physical victimisation, bullying, dating violence, sexual victimisation and witnessed/indirect victimisation (see Appendix 5 for details on the victimisation modules, composites and victimisation types asked about). Whilst these screener questions are not as detailed as the 34 questions on the original measure, they offer a more concise alternative whilst still providing an overview of the different types of victimisation. Further information on

injury, perpetrator and weapon use are explored in follow-up questions rather than separate screener questions.

Adaptations to the follow-up questions and the way in which follow-up questions were applied were also made. For every screener question to which the young person answered 'yes', they were asked to note how many times it had happened, how old they were when it first and last happened, and if it happened in the last year, over a year ago, or both (short follow-up questions). They were then asked to complete 10 to 19 additional closed and open-ended follow-up questions thinking only about the *last time* the incident happened to them (long follow-up questions). These questions were similar to the original JVQ, from which the same questions asking about the perpetrator were used but more were added in the current version.

The follow-up questions relating to property victimisation in the original measure (which asked about the object stolen) were removed. Additionally, questions asking about injury and hospital treatment were only included for the questions on assault, hate crime, and witnessed assault. The current adaptation included a greater number of questions about: the location of victimisation, the status of the young person at the time of the incident (e.g., who they were with, whether they were under the influence of alcohol), how scared and upset they were, and who they told about the incident and whether they were subsequently believed or supported. Each follow-up question was adapted to the specific screener question being asked.

It is important to note that unlike the original questionnaire, participants were not asked whether the incident disclosed was also part of another incident disclosed in the questionnaire. This was because of the need to reduce follow-up questions so

that they all fitted onto one page and also to reduce the complexity of the questionnaire so large numbers of participants could independently complete it.

The questionnaire was completed in paper format (See Appendix 6) and the question order of the original questionnaire was followed. Therefore, the less sensitive questions on property victimisation and physical victimisation ('conventional crime') were presented first, followed by bullying and dating violence ('peer victimisation'), and lastly 'sexual victimisation'. Questions on witnessed and indirect victimisation were presented separately in the second half of the questionnaire.

Screening questions asked about lifetime victimisation and follow-up questions were presented on the same page to collect more detailed information about the incident. This was intended to make it as simple and easy to navigate as possible for successful self-completion.

3.4.2.3. Reliability and validity of adapted JVQ

The questionnaire was tested for reliability and validity with the current sample. When testing for construct validity, significant weak to moderate correlations were found between the aggregate lifetime victimisation score and each of the standardised scores on the TSCC-A subscales (see Table 4). This suggests that aggregate lifetime victimisation has a positive relationship with trauma symptoms, which is as expected.

Table 4

Construct Validity of the Adapted JVQ: Correlation Between the Aggregate Lifetime Victimization Score and the Standardised TSCC-A Subscales (N= 727).

	Pearson's <i>r</i>
Anxiety	.33**
Depression	.34**
Anger	.33**
Post-traumatic Stress (PTS)	.37**
Dissociation	.33**
Dissociation- Fantasy	.29**
Overt Dissociation ^a	.29**

** Correlation is significant at the $p < 0.01$ level (2-tailed)

^aN= 717 due to non-completion of this sub-scale

The internal consistency of the 24 screener questions was tested on the 660 participants who answered all questions, and it was found to be questionable ($\alpha = .66$). For each of the four modules and six composite victimisation categories, internal consistency was low (see Table 5). Whilst the overall reliability of the measure is lower than that reported for the original JVQ when used with an American sample of young people, the reliability of the categories of victimisation and the tests of construct validity are similar. Findings on the reliability and validity of the NSPCCs adaptation of the JVQ have not been reported and thus cannot be compared.

Table 5

*Internal Consistency of the Adapted JVQ: Cronbach's Alpha (α) for the Full
Victimisation Questionnaire, Victimisation Category Scores, and Victimisation
Module Scores (N= 660).*

	Cronbach's Alpha (α)
Full measure	
All 24 victimisation screener questions	.66
Victimisation module	
Conventional crime	.44
Peer victimisation	.49
Sexual victimisation	.51
Witnessed/ indirect victimisation	.42
Victimisation category	
Property victimisation	.31
Physical victimisation	.24
Bullying	.48
Dating violence	.57
Sexual victimisation	.51
Witnessed/ indirect victimisation	.42

3.4.2.4. Calculating victimisation scores

Victimisation was dichotomised ('victim' yes/ no) based on whether the young person responded positively to any of the screener questions (representing different types of victimisation). Aggregate LT victimisation scores were also calculated by summing together the number of screener questions endorsed. To calculate PY aggregate victimisation scores, this process was repeated where the screener occurred in the PY. Separate direct and indirect victimisation scores were calculated by separating out screener questions into two distinct categories (direct victimisation = 14 questions, and indirect victimisation = 10 questions), aggregating or dichotomising responses as above. The same system was used when classifying participants as victims of a particular module or category of victimisation, and when assigning an aggregate score to a victimisation module or category.

Consistent with previous research by Finkelhor et al. (2009b) and Radford et al. (2013), LT poly-victims were defined as young people with the highest 10% of aggregate LT victimisation scores within the sample. This equated to an aggregate LT victimisation score of six or more different types of victimisation. Following the method set out by Finkelhor et al. (2007a), PY poly-victims were those who scored higher than the mean on aggregated PY victimisation scores, which equated to experiencing three or more different victimisation types.

Data from the follow-up questions within the adapted JVQ was used in this research to explore the characteristics of offenders and the location of victimisation. Young people were asked to respond to these questions thinking about the *last time* something happened to them. However, the pattern of response given by some young people suggested they were answering the screener follow-up questions for more than just the last incident (e.g., they circled 'on the way home from school'

and ‘on a weekend’ on one follow-up question). Differences between participants seemingly answering for the last incident versus those answering in relation to more than one incident were therefore compared using chi-square analysis. Few significant differences were identified and the results are therefore reported for the whole sample, highlighting significant differences between participants where necessary.

3.4.3. Journey questionnaire.

A 12-item ‘Journey questionnaire’ was designed to explore the journeys young people made to and from school (see Appendix 7). This included questions on how often the young person attends school, how they travel there and back, the characteristics of their journey (e.g., walk alone, make any stops), the length of their journey, and participation in before and after school activities (including transportation to and from these activities).

3.4.4. Mapping exercise.

Each young person was given a map which covered their school and a 1.5 mile radius around it (Appendix 8), as well as an instruction sheet (Appendix 9). Participants were asked to indicate on the map where each disclosed victimisation occurring outside of school within the last year, took place. This was aided by providing them with a list of the questions asked in the JVQ for ease of reference (Appendix 10).

3.4.5. The Trauma Symptoms Checklist for Children-Alternate form (TSCC-A).

The Trauma Symptoms Checklist for Children-Alternate form (TSCC-A) (Briere, 1996) was used to assess the psychological well-being of participants (See

Appendix 11). This questionnaire is said to be suitable for children aged 8-16 years and is widely used in research looking at the impact of victimisation on children and young people. The 44-item alternate form was chosen whereby all items relating to sexual issues have been removed, thus reducing the intrusiveness and sensitivity of the questions asked in the measure.

Questions on the TSCC-A ask young people to report how often they have particular thoughts, feelings and behaviours from 0 (not at all) to 5 (very often). Responses are then organised into five clinical scales (See Table 6 for the definition of each scale): Anxiety, Depression, Anger, Post-traumatic Stress (PTS), and Dissociation (which has two subscales; dissociation-overt and dissociation-fantasy). Amongst these are seven critical items to highlight problems or safeguarding issues and these formed a part of the safeguarding procedure for the current research (See Appendix 12).

Item responses are totalled and a *T* score for each scale is given which equates to a standardised transformation of the raw scale score (similar to a percentile score). This provides information about the young person's score relative to a standardised sample ($N = 3,008$) (Briere, 1996) to indicate whether a young person is scoring in a clinically significant range (>65) or has difficulties in a particular area (60-65).

Table 6. *Brief Description of TSCC-A Clinical and Validity Subscales*

Scale	Item content
<i>Clinical scales</i>	
Anxiety	Generalised anxiety, hyperarousal and worry; specific fears; episodes of free-floating anxiety; and a sense of impending danger.
Depression	Feelings of sadness, unhappiness and loneliness; episodes of tearfulness; depressive cognitions such as guilt and self-denigration; self-injurious behaviour and suicidality.
Anger	Angry thoughts, feelings and behaviours; having difficulty de-escalating anger; wanting to yell at or hurt people; arguing and fighting.
Post-Traumatic Stress (PTS)	Intrusive thoughts, sensations and memories of painful past events; nightmares; fears; cognitive avoidance of painful feelings.
Dissociation	Derealisation; one's mind going blank; emotional numbing; pretending to be someone else or somewhere else; day-dreaming; memory problems; and dissociative avoidance. This has two sub-scales: Overt dissociation and Fantasy.
<i>Validity scales</i>	
Underresponse	Reflects a tendency toward denial, a general under-endorsement response set, or a need to appear unusually symptom free.
Hyperresponse	Indicates a general over-response to TSCC-A items, a specific need to appear especially symptomatic, or a state of being overwhelmed by traumatic stress.

Adapted from Briere (1996).

The TSCC-A comprises two validity scales to indicate underresponse (tendency to deny symptomatology) and hyperresponse (tendency to over-respond to symptom items). In the current study, attention was given to pupils who scored highly on the hyperresponse ($N = 0$) and underresponse ($N = 30$) scales, thereby invalidating their TSCC-A. Table 7 shows statistical differences between those who scored high on underresponding and those who did not, in line with the findings for social desirability reported in chapter 3, section 3.5.2.1.1. They were therefore removed from the study to improve reliability (see chapter 2, section 2.4.4.2.). Where young people had five or more missing items, their TSCC-A was deemed invalid ($N = 3$) and they were not included in the analysis within the current chapter.

The TSCC and TSCC-A have been extensively researched (Strand, Sarmiento, & Pasquale, 2005) and their validity and reliability is outlined in the Professional Manual (Briere, 1996). The five TSCC-A subscales have shown high internal consistency (α s range from .82 to .89) and intercorrelation (.43 to .96), and the validity subscales show moderate to high internal consistency ($\alpha = .66$ and .85).

The scales also covary in expected ways with other scales sharing similar content (concurrent validity) and correlate well with other psychological tests (convergent validity) (Briere, 1996). The TSCC has also been found to have construct validity with regard to traumatic impact (Briere, 1996).

Table 7. *Chi-square Analysis of the Differences between Young People Whose TSCC-A scores Were Invalid Due to Underresponding Versus Those Who Were Not (N=760).*

Variable	Invalid TSCC-A due to underresponding (% answering yes)	Underresponding within the normative range (% answering yes)	Chi-square ((df) χ^2 , p)
Friends ever in trouble with the police	3	24	(1) 6.9, $p = 0.014^{**}$
Young person ever in trouble with the police	7	10	(1) 0.3, $p = 0.760$
Never drink alcohol with friends	78	57	(1) 6.1, $p = 0.014^{**}$
Ever been victimised	67	84	(1) 6.4, $p = 0.016^{**}$
Ever been directly victimised	37	63	(1) 8.7, $p = 0.004^{**}$
Ever been indirectly victimised	53	70	(1) 3.9, $p = 0.067$
Poly-victim	3	14	(1) 2.8, $p = 0.107$

** $p < 0.01$ (2-tailed).

3.5. Sampling Strategy

3.5.1. Project collaboration and consultation.

Project collaboration with Warwickshire Police was established (February, 2010) to maximise the potential impact of the findings for the schools, communities and police forces involved. The main aims of the project were aligned with some of the key goals of the Safer Schools Partnership (SSP) in Warwickshire, including preventing and targeting crime, and providing adequate and effective services to victims. A meeting was held with key members of the SSP for the county and their collaboration on the project was gained (May, 2010). This helped to identify a way forward for the project and to develop the method to be used in order to increase the impact the findings may have on future intervention and the protection of young people.

Information on the project was sent to the Education Board and Director of Education for the Local Education Authority in Warwickshire and approval of the project was granted (May, 2010)⁴.

3.5.2. Recruitment of schools.

All 36 mainstream schools in the county of Warwickshire were provided with information about the project via letter and e-mail (June, 2010). Project contacts within the police force also liaised with schools to promote the research and encourage participation. One week after the letters were posted out, a phone call was made to the school to discuss the project with the head teacher (or appropriate person). Visits were then made to nine schools who expressed an interest in the

⁴ Collaboration with Leicestershire Constabulary on the project was also gained, as was collaboration with Leicestershire Safer Schools Partnership. However, approval from the Leicestershire Education Board was not granted in time for the project to be run in Leicestershire schools. Despite a number of discussions, it was not possible to establish collaboration with the police force in Nottinghamshire and thus the project was not conducted in this county.

project (attended by the researcher and also a contact from the police force in most cases), of which, eight agreed to participate (22% of all schools contacted). Amongst the schools which declined participation in the research, reasons included: lack of time during the school day to fit the project in without disrupting lessons; pre-existing school-involvement in a number of initiatives; 'other commitments'; school was in a relatively isolated community and the head teacher felt access to support would be limited; and some pupils were making early preparation for GCSEs. However, many schools did not provide a reason.

Throughout the recruitment process, progress updates were fed back to the SSP steering group. Many attempts were made by the researcher to promote the project at one of the Secondary Heads Consortiums, yet this was not made possible during the timeframe of the project. The CAHRV guidelines (Martinez et al., 2007) suggest prevalence studies should aim to achieve maximum representation of different population groups. Efforts were therefore made to include young people in the sample who would be absent or underrepresented within a mainstream school setting. Contact was made with a pupil referral unit but their participation was not possible for school-related reasons. A meeting was also held with a young member of the traveller community to explore the inclusion of these young people. However, problems were identified with the methodological logistics of doing this and it was therefore decided not to proceed along this avenue. The study therefore only includes young people accessing mainstream education. However, there was no inclusion criteria imposed on recruitment and all young people of all educational needs were invited to participate.

3.5.2.1. School participation.

The eight schools that agreed to take part were a mixture of mainstream single-sex ($N = 3$) and coeducation ($N = 5$) schools; three were grammar schools and five were community schools (including one Catholic school). According to the latest OFSTED reports carried out before the start of the project, the schools ranged from outstanding ($N = 3$) to good ($N = 2$) and satisfactory ($N = 3$). All of the schools in Warwickshire were part of the SSP framework at the time of the research, yet the extent of their involvement in the initiative differed. All participating schools had an assigned Police Community Support Officer (PCSO) who visited the school when necessary.

3.5.3. Recruitment of young people.

Within the eight consenting schools, all pupils in years 9 and 10 (13-15 years) were invited to take part. However, the level of involvement in the project was specified by the school: in five of the schools all of the pupils in years 9 and 10 were invited to participate in the project; two schools chose to invite only those young people in year 9; and one school invited only those in year 10.

These two year groups were selected as it was felt that these pupils faced less pressure than others; in years 7 and 8 pupils are still settling into school, and those in year 11 are preparing for their GCSEs. It is noted however, that pupils in year 10 will also have been making some preparation for their GCSEs which is why two schools chose to exclude them.

Older and younger children are said to be exposed to different risk factors for victimisation and experience different types of victimisation based on their level of dependency and development (Finkelhor, 2008). Therefore, this specificity in the

age of the sample will prevent extrapolation of the findings to older and younger children. However, the findings of the research are less likely to be influenced by age and can be applied more confidently to this specific age group.

3.5.4. Consent and assent.

3.5.4.1. Parents.

With the schools' permission, passive parental consent (implied consent) procedures were used (with the exception of one school where active consent was used; see details below). Each parent/guardian was sent a project pack which contained an information letter and consent form for parents to remove their child from the project (Appendix 13) along with a pre-paid envelope for this to be sent straight to the researcher (or handed in to the school), and a letter from the school outlining their support for the project (see example letter in Appendix 14). This was sent home with pupils at the beginning of week one, and subsequently posted out to parents for the beginning of week two; maximising the opportunity for parents to receive, read and respond to the information. In one school, an electronic project pack was e-mailed out to parents as this was the school's preferred means of communication.

One school expressed a desire to gain active parental consent and felt that as they were a small school and had a good level of communication with parents, this would not have a huge impact on consent rates. In this case, parents were sent the same project pack but were required to return the consent form stating whether they did or did not give their consent for their child to take part (an extra box was added

into the consent form for parents to tick whether they did or did not give their consent).

Parents were given at least four weeks to remove their child from the study (or opt-in where active consent was used) before the first data collection session. The letter clearly stated that the information collected during the research would be confidential, and would focus only on victim experiences *outside* of the family home. Parents were also informed that a safeguarding procedure was in place whereby confidentiality would be broken should risk of harm be identified.

Passive consent greatly improves response and project participation rates and reduces some of the problems relating to sampling bias when using active consent procedures (Hollmann & McNamara, 1999; Pokorny, Jason, Schoeny, Townsend, & Curie, 2001). Research into active and passive consent shows that failure to return a consent form is more likely to indicate latent consent rather than latent refusal (Ellickson & Hawes, 1989) and when parents do refuse consent, the form is usually sent back promptly. However, Ellickson and Hawes (1989) noted that 13% of parents in their study reported not having received the information sent to them highlighting a need to ensure parents have a chance to receive and read the information. This informed the decision within the current project to send the information pack home with pupils as well as sending it out in the post. Additionally, research into the improvement of active consent procedures shows how a letter of support from the head teacher of the participating school can increase return rates (see Ji, Pokorny, & Jason, 2004). A letter of support from the school (adapted by the head teacher or key staff member) was therefore included in the project pack to encourage consent.

Passive parental consent for research with children and young people is approved by the British Psychological Society (BPS) code of ethics (British Psychological Society, 2004, p. 8) as long as the school gives permission for this to be done and child assent is gained; all of which were adhered to in this project. The procedure was also approved by the University of Nottingham ethics committee.

In the seven schools where passive consent was used, only 58 out of 2,002 of the parents contacted (3%) opted their children out of the research. We are not aware of any parental complaint to the schools about their child taking part in the project. In the one school where active consent was used, 21 out of 95 parents (22%) did not return their consent forms, thus removing their child from the research. Differences in outcome and sample characteristics have been noted when participants are recruited to studies using active versus passive procedures (Unger et al., 2004). However, studies have shown that active versus passive parental consent does not affect outcome or sample characteristics so long as high response rates are obtained (Eaton, Lowry, Brener, Grunbaum, & Kann, 2004). This was therefore not considered to be problematic in the current research as the school in which active consent was used obtained a high percentage of parental consent (78%). In total, 79 young people out of 2,097 (4%) did not receive parental permission to participate in the research (active and passive consent combined).

3.5.4.2. Young people.

An active consent procedure was used to gain full informed consent from all young people in the target population. Each young person was given a letter to fill out during school 'registration/tutor time' (or equivalent) asking them to indicate whether they consented to taking part in the project (Appendix 15). This outlined the aims and importance of the project and the confidentiality and safeguarding policies

and procedures, and was administered following the delivery of letters to parents (beginning of week 3). Where young people were absent at the time, class teachers gave them a consent form at the next opportunity.

Schools were instructed to ask pupils to read the information letters and complete and return the consent form during the same session. However, completed consent forms were only collected back from 1,576 out of 2,097 pupils (75% return rate) and of these, 1,088 participants consented to take part (75%). In many instances, there were classes where the vast majority of young people said either yes or no to taking part. There therefore appeared to be a pattern in the way in which young people responded to the consent form, according to the pattern of response for the class. This suggests that the way in which pupils were given consent forms by the teacher (portraying their support for and perceived value of the project), and/or the way in which young people's peers responded, may have influenced their decision to participate.

Only those young people who provided consent and had parental consent participated in the research. Due to school absence during the research sessions or a lack of parental consent (in a small number of cases), 963 of the original 1,088 pupils (89%) who gave consent took part in the project. Of these, 30 young people were used in the second pilot study only. Of the remaining 933 participants, young people who were absent for one of the sessions ($N = 40$), scored high on the measure of defensiveness/ social desirability ($N = 133$; see chapter 3, section 3.5.2.1.1.), or had invalid scores due to underresponding on the TSCC-A ($N = 30$; see chapter 7, section 7.3.2.1.) were also excluded. Therefore, the final sample consisted of 730 participants (35% of the target population).

Overall, gaining research collaboration from the police force and the SSP, followed by the recruitment of schools, parents and young people to the project, took a total of eight months (February - October 2010).

3.5.5. Power Analysis.

The young people taking part in this research were from eight different secondary schools and within these schools, from different classes during the school day according to subject (e.g., Maths, English, etc.) and educational ability. It is therefore likely that those with the same school or class background have more mutually shared experiences (e.g., victimisation) than they would have with other individually and randomly selected young people of comparable age and educational background. This therefore means that the clustering that is part of the sampling design has to be taken into account when calculating power analyses and statistically analysing the data collected within this thesis (adjusting statistical analyses to account for clustering is discussed in section 3.10.2.3).

As young people attend many classes made up of different young people throughout the school day, grouping them according to a specific class would have been difficult and meaningless⁵. However, it is important to account for clustering at the school level as schools are likely to have unique characteristics and environmental contexts which differ from other schools and may impact on the experiences of the attending young people.

⁵ Additionally, the way in which the data was collected meant that the school classes young people belonged to could not be determined (e.g., whole year groups of young people took part all at once and data was not recorded according to the class the young person belonged to).

With this clustered data, there are two sources of variance; variance within young people within the schools and variability between clusters. As such, there becomes increased variance within any statistical analysis due to the combination of these areas of variance. This therefore needs to be taken into account as they impact on the analysis by increasing standard errors leading to widened confidence intervals and increased p-values, compared to a randomly sampled study of the same size. As such, the sample size is reduced and power is lost (Wears, 2002)

The intraclass correlation coefficient (ICC) can be calculated to assess the level of within-cluster variance; the proportion of the total variance within the data which is due to clustering. Within this thesis, this was done using the overall weighted mean cluster size (weighted due to differences in the size of clusters; see Ukoumunne, Gulliford, Chinn, Sterne, and Burney (1999)) and the mean square estimates for within subjects and between cluster variability based on analysis of variance (ANOVA) using an online calculator (<http://www.danielsoper.com/statcalc3/calc.aspx?id=42>) (see Appendix 16 for figures on the ICC, VIF and weighted means found). This analysis was carried out for both continuous and dichotomous outcomes, acknowledging the limitations of this method with dichotomous data⁶ (see Ukoumunne et al., 1999). The ICC was then used to calculate the variance inflation factor (VIF) which identifies the amount that the total sample size should be increased by if the clustered study is to have the same statistical power as a study based on a randomly sampled population (Wears, 2002).

⁶ Namely that 'the within-cluster dependence of binary responses tends to be low if the prevalence of the outcome is low, and outcome measures with a prevalence of 50% will lead to larger design effects' (Ukoumunne et al., 1999, p23).

Ideally, power calculations would take clustering into account based on the VIF a-priori (calculated using data collected from pilot studies or similar research findings within the literature) to identify the number of participants needing to be recruited into a study. In the current study, however, power analyses were calculated a-priori based on the principles of a randomly sampled population, and then adjusted posteriori based on ICC and VIF values calculated from the actual sample and data collected. This was done by multiplying the number of participants calculated within the power analyses by the VIF (Wears, 2002). These power analyses therefore give the number of people needed to have been recruited to the study to find associations with a medium effect taking into accounting clustering within the data.

Observational data based on the real-world experiences and behaviours of young people was to be collected and used within this study. As such, it was important that any patterns, characteristics and predictors of victimisation could be detected within an 'everyday' sample of young people (e.g., a class or year group of young people within a school, which is unlikely to exceed 300 young people). Doing so allows for findings which are more amenable to, and cost-effective for, intervention. Whilst smaller effect sizes provide more power, they are at risk of identifying relationships which only exist amongst a small sub-section of a population. Any intervention based on these findings may therefore be costly and produce limited results. A medium effect size was therefore sought in the current research to allow for the identification of findings which would help inform interventions designed to benefit a larger proportion of the target population (i.e., young people).

Power analyses were computed using the computer program '*G*Power*' (Erdfelder, Faul, & Buchner, 1996) based on the anticipated statistical analyses used

to test each hypothesis. This included: chi-square, t-tests, multiple hierarchical linear regression, and logistic regression. Alpha was set at .01 for all power calculations⁷ and this was used throughout this thesis (see section 2.10.3.). Power (1- β err prob) was set to 0.80 based on Cohen's minimum suggested power for an observational study (Cohen, 1988).

Based on the power calculations displayed in Table 8, the current, clustered sample size of 730 young people means the anticipated analyses appear to be able to detect only large effect sizes for the linear regression analyses with the largest number of predictors and chi-square analyses with one degree of freedom. Medium effect sizes can be achieved for the linear regression analyses with the smallest number of predictors, chi-square analyses with three degrees of freedom, and both logistic regression analyses. However, the clustered data fails to achieve a large or medium effect size for the one t-test within the thesis.

⁷ A number of statistical analyses were planned to provide a detailed exploration of the data collected within this study. Therefore, a more conservative alpha value of .01 was set (instead of the usual .05) to reduce the probability of achieving a Type I Error.

Table 8.

Power calculations prior to, and after, adjustment for clustering within the data.

Analysis	Medium effect size		Large effect size	
	Pre-adjustment for clustering	Adjusted for clustering	Pre-adjustment for clustering	Adjusted for clustering
Chi-Square				
One degree of freedom	130	1277	47	462
Three degrees of freedom	172	497		
T-test	192	4166	78	1692
Linear regression				
Eighteen predictors	199	1190	96	574
One predictor	82	490		
Logistic regression				
Analysis 1	186	626		
Analysis 2	248	660		

Chi-square, medium effect size $d=.3$, large effect size $d=.5$. T-test, medium effect size $d=.5$, large effect size $d=.8$. Multiple hierarchical

linear regression, medium effect size $f^2= .15$, large effect size $f^2= .35$. Logistic regression, medium effect size $OR=3.5$.

3.6. Procedure

The research was delivered to young people as part of an educational workshop on 'Safety and Victimization' and in most schools this was integrated within their PSHE curriculum. This allowed for an educational element to the research with minimum disruption to the school day. As a result, the sensitive subject matter could be appropriately and thoroughly dealt with at the beginning and end of each session.

All sessions took place a minimum of four weeks after the last consent form was sent to parents (data was collected over a period of nine months from the November 2010 - July 2011). For the first session in each school, pupils were gathered into the school hall or gymnasium for a 'Safety and Victimization workshop' held by the PCSO assigned to the school (or another contact from the police service when this was not possible) and the researcher. Research by Hamby et al. (2004) suggests that the majority of young people have experienced the victim experiences measured in the Juvenile Victimization Questionnaire (JVQ). As a result, they suggest that it may be beneficial to highlight this to young people before they complete the measure to make them feel more at ease with disclosing their own experiences. Therefore, the workshop aimed to explore with young people; what 'victim' and 'victimisation' meant, the types of victim experiences young people could have within the school and community, the nature of a secret, and the importance of telling someone if something unwanted has happened (Appendix 17).

At the end of the workshop, the project's confidentiality policy and safeguarding procedure were reiterated and instructions were given as to what would happen next. Participants were also reminded that they did not have to answer any question they did not want to and could withdraw from the study at any time. It was

important to verbally reiterate the confidentiality policy as this has been found to produce better results and response rates on sensitive questions (Singer, 1978; Singer, Von Thurn, & Miller, 1995).

Where possible, all pupils in the year group were invited to attend the discussion/workshop. All pupils then returned to their classrooms when the project documents had been handed out to consenting participants. This helped ensure all pupils received the same level of education on safety and victimisation regardless of whether they took part in the research. Pupils were found to be very engaged in this workshop and positive feedback was received from schools. The workshop was held in seven of the participating schools, with one school opting out as they had recently completed a series of PSHE lessons based around victimisation and bullying. In this case, the procedure and confidentiality message was given to participants at the start of session one and the project commenced straight away.

In five schools, the research was spread out over two sessions, each lasting between 50 to 60 minutes. This was to fit in with the structure of the school day and to allow enough time for project completion. The duration between sessions varied from three days to two weeks and in one school two consecutive sessions took place. Each measure was independent and there was no need for information retention between the measures issued in session one and session two. In the remaining three schools, the workshop and all of the study documents were completed in one single session which ranged from 75 to 120 minutes. In all cases, participants were found to have had enough time to complete all of the study documents.

Participants were handed an envelope at the start of each session containing the instructions and documents for that specific session. There was an individual ID number on the back of each document which linked to the participant's consent

form; no identifying information was written on any of the documents collected for the research. Pupils were sat as far apart from each other as was feasible and instructed to work independently and to respect the privacy of others. At least one class teacher and the researcher were present at all times to ensure independent working and to answer any questions. Teachers were provided with a list of frequently asked questions based on the pilot study and instructions to read out to the class on how to complete each of the measures (this was done by the researcher where possible). They were also instructed to remind pupils to answer the questions in relation to things that have happened *outside* of their family. Pupils who had special educational needs were supported in their usual way (most often through teaching assistant support).

At the end of the session, all of the documents were placed back into the envelope and sealed before being handed to the researcher. Participants were given two booklets to take away with them: one contained information on local and national help and advice services (Appendix 2); the other offered advice on how pupils could keep themselves safe in the school and the community (Appendix 3). Participants were also given the opportunity to ask the class teacher or the researcher any questions.

Where young people were present in the classroom/exam hall for the workshop but did not have parental consent to take part in the project, they were assigned other educational tasks. This was the safety and victimisation quiz sourced by the researcher, or work set by the school.

3.7. Ethical Concerns

Questioning young people about their victim experiences has the potential to cause distress. However, the context in which this research was carried out worked to keep the level of distress to a minimum by discussing the concept of victimisation (outside of the family) with young people. Additionally, information was provided to participants on how to protect themselves when in school and community environments, and where they can go to get help and report crime. A school nurse, school counsellor, or designated Child Protection Officer was available in every school to address any issues should they arise from participation in the project. The project and pilot studies received full ethical approval from the University of Nottingham Ethics Committee before any research was carried out.

3.8. Safeguarding Issues

The Education Safeguarding Manager for the county was consulted (September, 2010) to formulate a safeguarding strategy to protect the young people involved in the research (see Appendix 12). This specified that safeguarding issues would first be identified by the researcher and then referred to the Child Protection contact within the Police for consultation. Where sufficient concern was raised, confidentiality was then broken and the designated Child Protection Officer at the school was contacted to deal with the issue. Potential safeguarding issues were identified for 247 of the original 933 participating young people (26%), 214 of which were referred to the school to address the concerns raised. Following consultation with the Police Child Protection contact associated with the project, it was agreed that no further action was needed for the remaining 33 young people. No

complaints were received as a result of this procedure and the police and schools involved were satisfied that safeguarding issues were appropriately dealt with.

3.9. Participants

The final sample consisted of 730 participants aged 13 to 16 years (mean 13.8 years, SD 0.72) from one county in the UK. There were more females ($N = 471$, 64.5%) than males ($N = 259$, 35.5%) and 3% of participants responded positively to the question 'do you have a disability'. The ethnicity of the sample was: 89% White, 1% Black, 4% Asian, 5% 'Mixed', and less than 1% 'Other'. This is similar to the ethnic composition from which the sample was derived ("Rugby Borough Equality & Diversity Profile, May 2011", 2011)⁸. With regards to family composition, 66.7% of participants reported living with both parents, 16.2% lived in a single parent household, 13.6% in a household with a step-parent present, 0.3% lived with adoptive parents, and 3.3% lived in another family structure.

To measure socio-economic status, pupils were asked whether they were entitled to a free school lunch and 8% of the sample answered 'yes'. This is slightly less than the 10% (5-16 year olds) documented by the county ("Rugby equality and diversity profile", 2011). However, 31% of participants answered 'do not know' to this question and a request was therefore made to schools for this information. Due to confidentiality, only five of the eight participating schools provided this data which tended to be overall year group figures rather than individual pupil entitlement. Conflicting information was identified between the information

⁸ (ethnic profile of 0-15 year olds for the county in 2007 was 90% 'White', 1% Black, 5% Asian, 3.5% Mixed, less than 1% 'Other'. Statistics based on data from the Office of National Statistics within the 'Rugby equality and diversity profile, May 2011' online document).

provided by schools and pupils', indicating that this data was unreliable and it was therefore excluded from any analysis.

In terms of offending and delinquency, 10% ($N = 69$) reported that they had been in trouble with the police themselves and 24% ($N = 174$) of the sample said they had friends who were at least 'sometimes' in trouble with the police.

3.10. Data analysis

Before any analysis was carried out, the data were explored for missing values and outliers. It was then tested to confirm whether it met the assumptions for parametric analysis (normally distributed data and equality of variance).

3.10.1. Cleaning the data for missing variables and outliers.

Participants were only included in the final sample ($N = 730$) if they had completed the JVQ and the demographic questionnaire. Of these, two young people had invalid TSCC-A questionnaires due to missing data and one young person did not complete the measure. Additionally, 15 (separate) young people had missing journey questionnaires and analysis carried out on the way young people travelled to or from school was therefore based on a maximum 715 young people. The amount of missing data within the completed questionnaires was explored. If less than 5% of data points are missing at random (MAR) within a data set then this is said to pose relatively few problems for analysis and is usually handled through the deletion of missing cases within SPSS (Tabachnick & Fidell, 2005).

None of the variables on the demographic questionnaire had missing cases of 5% or more, nor did any of the screener questions on the JVQ. Information on the gender of the perpetrator for contact sexual assault was missing for 12.9% ($N = 4$) of

young people on this follow-up question within the JVQ. This variable was explored using descriptive analysis only (chi-square), and the missing cases were therefore deleted from the analysis as it was not anticipated to pose a problem to the outcome. In addition, the two questions asking about before- and after-school activities within the journey questionnaire had 6.6% (N= 47) and 9.9% (N= 71) missing data, respectively. These two questions were overleaf on the journey questionnaire and it is therefore likely that they were missing because participants did not turn over the page. These missing responses were therefore treated as 'missing at random' and missing cases were deleted from the analysis.

The data was explored for outliers and extreme cases based on the aggregate victimisation scores for total, direct, and indirect victimisation in the past year (PY) and lifetime (LT). This was also done for males and females separately. A very small proportion of individual cases were identified as being extreme on the LT total victimisation score ($N = 4$), LT direct ($N = 1$) and indirect ($N = 1$) victimisation scores, and PY total victimisation score ($N = 2$). Out of 730 participants, this amount of outliers is unlikely to have an impact on outcome. As a way of reducing the impact of extreme variables on statistical analysis, Tabachnick and Fidell (2005) suggest that extreme scores should be changed to a value which is one more than the highest, non-extreme score. In the present dataset, the extreme scores were naturally one more than the last score, therefore suggesting they will be unlikely to have an effect on any statistical analysis. They therefore remained in the dataset, unchanged.

3.10.2. Testing the data for parametric analysis.

Before any statistical analysis was carried out, the data were explored to test whether they met the two main assumptions for parametric testing; normal distribution and homogeneity of variance. Where these assumptions were violated,

non-parametric alternatives were considered. Each parametric test has its own additional assumptions which were also tested and outlined in relation to each of the individual sections discussed below. Where these assumptions were violated, non-parametric equivalents were used.

3.10.2.1. Normal Distribution

Normality of the data was tested visually (histograms and Q-Q plots) and statistically (values of skew and kurtosis (the closer the score to zero, the less skew and kurtosis is present), and by looking at the associated z-scores (highlighting the significance of these values) and the Kolmogorov-Smirnov (K-S) test (significant values suggest significant deviation from normality)). With large sample sizes, defined by Field (2009) as > 200 participants, statistical calculations of skewness and kurtosis are often found to be significant even if deviation from normality is small. In such cases, Field recommends a visual, rather than statistical, exploration of normality. Visual and statistical explorations of normality were used in this thesis.

It was anticipated that the data for aggregate victimisation levels would be positively skewed given that multiple experiences of victimisation are less common (Martin, Huebner, & Valois, 2008). Based on the large sample size for this research however ($N = 730$), normality of the data can be assumed in accordance with the central limit theorem (Field, 2009). On this basis, normality was less of a concern when conducting statistical analysis with the whole sample. Where the data were grouped however, this reduced the sample size and increased the importance of normality testing.

Where the assumption of normality was violated, the data were transformed using square-root transformation (selected for its ability to work with 'zero' scores) or logarithmic transformation (LN) (Field, 2009). Where this failed to improve

normality, non-parametric tests were used. The normality of the data for each section of the analysis within study one is discussed in the relevant sections below.

3.10.2.2. Homogeneity of variance

Homogeneity of variance refers to the equality of variances across groups. Testing for this, the Levene's test and Hartley's F_{\max} test (i.e., the Variance Ratio) show whether the variance within the groups significantly differ from each other (i.e., heterogeneity). Visual exploration of box plots for the data also provides an indication of homogeneity. Large samples are known to affect the results of the Levene's test as they increase statistical power which leads to significant findings. The Hartley's F_{\max} test assesses the variance ratio based on the sample size and the number of variances being compared (Pearson & Hartley, 1954) and is therefore more accurate with larger samples. If the variance ratio falls under the relevant critical value (as defined by Pearson & Hartley) then homogeneity of variance can be assumed. Where this assumption was violated, transformation of the data using the methods described above was explored and non-parametric alternatives were used when necessary.

3.10.3. Working with clustered data

To account for the use of clustered data within the statistical analyses for this thesis, adjusted confidence intervals (CIs) were given for all percentages and means. These CIs were first calculated based on the 'real' sample size and then adjusted to account for clustering by multiplying the confidence interval width by the inflation factor (square root of the VIF)⁹.

⁹ This is following the advice of a qualified statistician.

Univariate tests were carried out treating the data as un-clustered, and then adjusting for clustering by dividing the chi-square and t-test statistics by the VIF and square root of VIF, respectively (Thompson, Fernald, & Mold, 2012). For the multivariate analyses, two forms of multiple hierarchical linear or logistic regression analyses were initially carried out: a regression with school fixed effects on the intercept, and a regression with school fixed effects on the slope⁹. A regression with school fixed effects on the intercept was initially carried out to control for potential differences in the mean or prevalence of the outcome variable between schools. Following this, a regression with fixed effects on the slope was carried out to explore whether the direction and strength of the effect of the predictor on the outcome variable differed between schools. In order to conduct these two forms of fixed-effects analyses, seven dummy variables were created to account for each school (the eighth school acted as the reference school). For the regression with fixed effects on the intercept, these school dummy variables were entered into the regression model in the same step as the main predictor variable. For the regression with fixed effects on the slope, an interaction term was created between each main predictor and each of the seven school dummy variables. This was done for the main predictor variables only in order to minimise the number of variables on the right-hand side of the equation, and thus also to minimise the inferential risks of low power and of capitalisation on chance. However, including these interaction terms into the regression models greatly increased the number of predictors within the regression analyses, significantly reducing the power of the sample to detect significant effects. It also created problems within multicollinearity in all regression models which, on the whole, could not be resolved by centring the variables. On the basis that the fixed effects regression analyses with fixed-effects on the intercepts

controls for the effects of clustering on the dependent variable, these form the analysis within this thesis. The regression analyses with fixed-effects on the slope were not included in this thesis¹⁰.

3.10.4. Statistical analysis

All statistical analysis in this thesis was carried out using SPSS 19. A large number of statistical analyses were carried out, inflating the likelihood of Type I error (incorrectly rejecting the null hypothesis). Therefore, a more conservative alpha value of $p < .01$ was applied to interpret the significance of the research findings.

Descriptive data analysis was first carried out to explore the prevalence of extrafamilial victimisation, multiple and poly-victimisation, and the characteristics of offenders. Chi-square analysis was then used to statistically analyse differences between male and female victim experiences and the characteristics of poly-victims and lower-level victims. Based on the answers given by participants on the screener follow-up questions, the timing and location of victimisation could be identified for each of the direct victimisation types. This was in relation to victimisation in school, in the community, and on the journey to and from school.

To further explore the locations and geographical clustering of extrafamilial victimisation, a case study was carried out with 214 young people attending one coeducational secondary school ($N= 65$), one boy's grammar school ($N= 44$), and one girls' grammar school ($N= 105$) in one English town (this captured all three secondary schools in this town). Individual PY victimisation data from participants within each of these schools were collated onto one map to show the distribution of

¹⁰ This is based on the advice of a qualified statistician who confirmed that the fixed-effects regression with fixed-effects on the intercept sufficiently controls for the effect of clustering within the data.

victimisation experienced by young people in each school, as well as the overall pattern of victimisation within the town. Patterns of victimisation were then visually explored to look for hotspots, defined as geographical areas on the maps in which a number of victimisation locations cluster together. As part of this analysis, five separate chi-square analyses based 3 x 2 contingency tables (school [3] x mode of transport [yes/ no]) were carried out to explore differences in the ways in which young people at each of the three schools travelled to and from school (walked, cycled, got the bus, got a lift in a car, 'other'). The amount of victimisation experienced on the journey to and from school (collapsed into one variable; journey-based victimisation) was then statistically compared between the three schools for total victimisation and direct and indirect victimisation separately. This information was gained from the screener follow-up questions within the JVQ and therefore relates to the last time each type of victimisation happened to the young person. These three variables (total victimisation, direct victimisation and indirect victimisation) were significantly positively skewed and, because of the smaller sample size used in this case study, were deemed to have violated the assumption of normality. A non-parametric alternative to the one-way independent ANOVA (Kruskall-Wallis) was therefore used to explore differences in the amount of victimisation experienced on the journey to and from school across pupils attending the three schools.

A number of analyses were then planned to explore the relationship between extrafamilial victimisation and routine activities in relation to the journey home from school, variables relating to the end of the school day, and activities carried out in the community. An initial aim of this study was to explore the relationship between the characteristics of the journey to and from school and victimisation on

these journeys. However, a very small number of young people were victimised when travelling to school ($N = 10$) and analysis therefore focussed only on the characteristics of the journey home from school¹¹. The aggregate amount of victimisation on the journey home from school was significantly positively skewed and unable to be normalised through square-root transformation. This variable was therefore dichotomised ('victimised on journey home from school': yes/ no). A number of separate chi-square analyses were carried out to compare the way young people who were victimised on the way home from school ($N = 55$) travelled home compared to non-victims ($N = 655$). Chi-square analysis was chosen over logistic regression as young people tended to use more than one mode of transport (i.e., did not come home from school in the same way each day) and were therefore represented in more than one transport category (e.g., 'bus' and 'walk'). The independence of errors would have therefore been violated should the categories have been entered together into a logistic regression (separate chi-square analyses were carried out for each mode of transport (yes/ no)).

Logistic regression analysis was anticipated to explore whether the characteristics of the journey home from school for the young people who walked or cycled home (any stops made on the journey home (yes/no) and whether the journey was mainly travelled with someone else (half of the journey, most or the journey or all of the journey travelled with friends were classed as 'yes') or alone (little of the journey or none of the journey travelled with friends was classed as 'no')) increased their odds of being victimised on this journey. Further logistic regression analysis was then anticipated to explore the relationship between victimisation on the journey

¹¹ It was not possible to create an aggregated variable for victimisation on the journey to or from school as the characteristics of the journey to and from school were explored separately to recognise the differences in these journeys.

home from school and whether the young person's parents are home when they get home from school (dichotomised into 'yes' ('sometimes', 'most of the time and 'always') and 'no' ('not very often' and 'never')) and whether young people participate in after school activities (yes/ no). In both cases, school dummy variables were to be entered into the models to control for school-level clustering on the outcome variable. However, only 57 young people reported being victimised on the journey home from school across the whole sample. Individual crosstabs analysis of the data prior to the logistic regression analysis being carried out (victimisation on the journey home x the four main predictor variables and seven school dummy variables) revealed that more than 20% of cells had an expected cell count less than 5% in four out of ten crosstabs. This therefore violated the goodness-of-fit tests for logistic regression and would be likely to produce coefficients with unreasonably large standard errors.

To explore whether the characteristics of the journey home from school are associated with victimisation on this journey, 2 x 2 chi-square analyses were therefore carried out. This analysis was based on 321 of the 346 young people who walked or cycled home due to missing data on one or more variables. To explore the influence of routine activities relating to the end of the school day, these variables were explored for their ability to predict victimisation in the community on the whole, and not limited to the journey to and from school. This met the assumptions of logistic regression (absence of multicollinearity and independence of errors) and was based on 597 young people due to missing data on one or more of the variables for 133 young people.

Multiple hierarchical linear regression analysis was then carried out to explore the relationship between a number of different factors relating to the routine

activities theory and the extent of community-based LT victimisation. This analysis was based on 641 participants; 89 participants were removed due to missing data on one or more of the variables. A hierarchical method was chosen to allow the data to be entered into the model on separate steps according to the findings from previous research. The data were therefore entered in a series of blocks, each one representing one step within the hierarchy. The sample size was large enough to assume normally distributed data and statistical tests revealed that the data met the assumptions of multiple regression (homoscedasticity, independence of errors, linearity and an absence of multicollinearity) and was not affected by extreme residuals. The findings can therefore be generalised beyond the current sample (Field, 2009).

Gender, age, single-parent family, and living in a household with a step-parent present were entered into the model in the first block to explore their impact on outcome (aggregate LT community-based victimisation). None of these variables were significantly related to outcome and were therefore not included in the final model. Whether the young person had ever been in trouble with the police (yes/no) and whether they had friends who were sometimes in trouble with the police (yes/no) have both been well-documented within the literature as having significant relationships with victimisation. These variables were therefore entered in the first block of the final model alongside the school dummy variables. In the second block, variables relating to: the amount of time the young person saw their friends on an evening after school (on a scale of 0-5 nights a week), whether they saw their friends on the weekend (coded 'yes/sometimes' versus 'no'), whether they drank alcohol with friends (coded 'never/once' versus 'sometimes/ every week'), and their level of parental guardianship (score between 0-8 based on the answer to two questions),

were entered. These variables were forced into this block together, in no pre-defined order, due to the exploratory nature of the analysis.

Young people reported going to numerous places with friends on an evening and weekend and it was therefore not possible to enter a variable reflecting this into the above regression model as it would have violated assumed independence of errors. As a result, a 2 x 2 chi-square analysis was carried out to analyse the relationship between the places young people report going with friends (seven places dichotomised 'yes/ no') and whether they had experienced community-based victimisation (yes/no).

Finally, multiple hierarchical linear regression analysis was carried out to explore the ability of LT victimisation to predict trauma symptoms based on the TSCC-A sub-scales (depression, anxiety, anger, PTS, and dissociation¹²). This was based on 641 participants due to missing data for 89 participants on one or more of the variables within this analysis. Sub-scales were explored separately in keeping with the original design of the measure used (Briere, 1996) and recognising the differing impact independent types of victimisation may have on the young person. This analysis focuses on LT victimisation rates only as some of the prevalence rates for victimisation in the PY were too small for meaningful analysis to be carried out.

Three demographic variables (age, gender, family composition) were first entered into a multiple linear regression to explore their impact on outcome. Gender (only) was found to significantly predict depression ($\beta = -2.10$, $t = -3.41$, $p < .001$) and it was therefore retained and controlled for within the final regression models for depression by entering it in the first block. None of these variables were found to

¹² Only the overall dissociation score was used (not the two sub-groups) for ease of interpretation.

predict any of the remaining four outcome variables and were therefore not included in the final models for these outcomes.

Multiple hierarchical linear regression analysis with school fixed effects on the intercept was carried out. For these regression analyses, school dummy variables were entered into the regression model in the same block as the main predictor variable (victimisation category; block 2 or 3) following the addition of the demographic control variables (step 1, if applicable) and other forms of victimisation (block 1 or 2 in order to control for the aggregate amount of LT experiences of other victimisation categories).

LT and PY poly-victimisation (dichotomous: yes/no) were entered in the next block (block 3 or 4) to explore their independent effects on the model. Finally, social support (SS) and a SS x victimisation category interaction term were entered on the penultimate and final blocks of the model, respectively. This was to explore whether SS acted as a significant moderator of the relationship between victimisation category and outcome. SS was centred around the mean before being combined with victimisation type to reduce multicollinearity. This involved subtracting the mean SS score from each observation so that the interaction then becomes the product of the centred values (Aiken & West, 1991). The centred predictor and centred interaction term was then entered into the model. This removed multicollinearity from the regression models exploring property victimisation, physical victimisation, sexual victimisation and dating violence. For the models with bullying and indirect victimisation, these two variables were also

centred before being combined with the centred SS variable and entered into the models as centred predictors and centred interactions¹³.

To test whether there was a significant interaction effect within these regression models, the significance of the interaction term was assessed. Where a significant interaction was found, the relationship between the predictor and outcome variable was explored at varying levels of the moderating variable using an online calculator (www.jeremydawson.com/slopes.htm). Level of social support was determined based on a score (0-9) derived from the answers to three questions developed for the current research. It was not, therefore, based on a standardised measure of social support and does not have any clinically meaningful levels for which to determine high vs. low levels of social support. This therefore prevented the use of simple slopes tests to evaluate the relationship between the predictor and outcome at particular values of social support (as outlined in Dawson (2014)).

This analysis was based on a large sample of 641 participants¹⁴ and the normality of the data could therefore be assumed. Statistics for the final models revealed that the data met the assumptions of multiple linear regression (absence of multicollinearity, homoscedasticity, independence of errors, and linearity) and therefore the findings from the regression models can be generalised beyond the current sample (Field, 2009).

Finally, a linear regression analysis was carried out to explore the impact of victimisation in one location versus victimisation in more than one location (dichotomous variable: one vs. more than one location)¹⁵ on the young person's

¹³ This was due to remaining multicollinearity after centering of the SS and SSx bullying and indirect victimisation interaction terms.

¹⁴ 43 participants were excluded from the analysis due to missing data

¹⁵ This information is based on the location of victimisation in relation to the *last time* each victimisation type happened to the young person.

mental well-being (TSCC-A sub-section scores). The analysis was carried out on 593 young people¹⁶, 330 who were victimised in just one location (school *or* community) and 263 who were victimised in both locations. Prior testing of the data revealed positive skewness and heterogeneity of variance for anxiety, depression and dissociation when comparing young people victimised in one location versus two. The assumptions of normally distributed data and homogeneity of variance were therefore violated. Data were transformed using square-root transformation and logarithmic transformation (both types of transformation were carried out to explore which one had the most positive change on the data), both of which led to reduced skewness and equalised variance between groups (i.e., homogeneous variance). It was therefore decided to transform the data using logarithmic transformation as this had a better impact on normality over square-root transformation. However, dissociation did not change following transformation and violated assumed homogeneity of variance when included in the analysis (based on box's test of equality of covariance). Dissociation was therefore explored using fixed-effects logistic regression analysis with fixed-effects on the intercept by dichotomising the outcome based on whether the young person reported clinically concerning levels of dissociation, as specified in the original design of the measure (score >60; yes/no, Briere, 1986). School dummy variables were entered into the linear and logistic regression models alongside the main predictor variables to control for clustering in the outcome variable.

¹⁶ Data was missing for 21 young people who were therefore excluded from this analysis

Chapter 4. Study 1: results

4.1. Prevalence of extrafamilial victimisation.

Tables 9 and 10 present the prevalence rates for each module and category of victimisation within the PY and over the LT. Prevalence rates were also explored for young males and females separately, and the findings are discussed in section 4.3..

Extrafamilial victimisation was experienced by the majority of young people in the present sample. In total, 84.1% of the sample reported being a victim of one or more direct or indirect types of victimisation over their LT. The prevalence rate of young people experiencing one or more direct or indirect types of victimisation within the PY was 67.2%¹⁷. These figures are displayed in Tables 9 and 10 and Figures 2 and 3.

Appendices 18 and 19 presents tables displaying the percentage of the sample (separated by gender) that experienced each of the 24 victimisation types asked about in the JVQ, over their LT and PY, respectively. Direct and indirect victimisation and the prevalence of victimisation modules and categories were then explored (see Appendix 5 for an overview of the victimisation modules and categories), in line with the current literature in this area (Finkelhor et al., 2005b, Radford et al., 2013). No type of victimisation was counted under more than one victimisation module or category.

¹⁷ Some young people answered 'yes' to a victimisation screener question but did not answer the related follow-up question asking them when it happened (past year, over a year ago, or both). The information on timing was therefore recorded as 'missing' meaning the incident was included in the lifetime victimisation figures but not past year figures.

Table 9

Prevalence of Lifetime Childhood Extrafamilial Victimisation by Total Exposure and Victimisation Modules and Categories

Victimisation Type	Total sample			Victim Gender				χ^2 (gender difference)
	N	%	95% CI (\pm)	Male		Female		
	N	%	95% CI (\pm)	N	%	N	%	
Any exposure	614	84.1	6.06	224	86.5	390	82.8	0.33
Directly victimised	461	63.2	6.57	182	70.3	279	59.2	2.48
Indirectly victimised	509	70.0	9.21	171	66.3	338	72.1	0.35
Conventional crime	326	44.7	8.79	157	60.6	169	36.0	6.94**
Property victimisation	206	29.6	6.16	102	39.4	114	24.3	5.30
Physical victimisation	200	27.5	7.29	102	39.5	98	20.9	5.71
Peer victimisation	316	43.4	5.85	93	36.0	223	47.4	3.34
Bullying	309	43.0	5.84	92	35.7	221	47.0	3.32
Dating violence ^b	47 ^b	3.5 ^b	2.49	5	2.0 ^b	20	4.3 ^b	0.77
Sexual victimisation	99	14.6	4.16	20	7.8	86	18.3	5.66

N = 718- 730.

^aWhen contact sexual victimisation, non-contact sexual victimisation, and internet/mobile phone-based sexual harassment are included in the dating violence category, the number of young people reporting dating violence increases to 39; 5.3% of the total sample, 3.1% males, 6.6% females. χ^2 1.17.

Note: 95% confidence intervals (CI) and chi-square statistics have been adjusted for clustering.

** $p < 0.01$

Table 10

Prevalence of Past Year Childhood Extrafamilial Victimisation by Total Exposure and Victimization Modules and Categories

Victimization Type	Total sample			Victim Gender				χ^2 (gender difference)
	N	%	95% CI (\pm)	Male		Female		
Any exposure	474	67.2	8.3	182	72.5	292	64.3	0.89
Directly victimised	330	46.1	7.52	137	53.5	193	42.0	2.26
Indirectly victimised	347	49.9	10.57	122	49.6	225	50.0	0.001
Conventional crime	198	27.8	8.45	110	43.5	88	19.2	7.27**
Property victimisation	116	16.2	5.55	62	24.4	54	11.7	4.60
Physical victimisation	116	16.1	6.5	67	26.2	49	10.6	5.05
Peer victimisation	196	27.2	4.37	58	22.7	138	29.6	2.17
Bullying	195	27.0	4.36	58	22.7	137	29.4	2.04
Dating violence	14	1.9	1.34	2	0.8	12	2.6	1.55
Sexual victimisation	81	11.2	3.72	16	6.2	65	13.9	3.79

N = 693- 728

Note: 95% confidence intervals (CI) and chi-square statistics have been adjusted for clustering

***p* < .01 (2-tailed).

As can be seen in Tables 9 and 10, 63.2% of young people reported having been directly victimised over their LT, 46.1% in the PY. The prevalence of indirect victimisation was slightly higher, with 70% of young people reporting indirect victimisation within their LT, 50.1% in the PY. Conventional crime was the most prevalent aggregate victimisation module over the LT and PY, whilst sexual victimisation was the least prevalent. Looking at categories of victimisation, bullying was the most prevalent category experienced by the sample over the LT and PY, whilst dating violence was the least prevalent.

4.2. Offender and victim characteristics.

The perpetrator of the different types of victimisation against young people was known to the victim in most cases¹⁸. This is with the exception of kidnap/attempted kidnap which was most commonly perpetrated by a stranger (86.7%) (see Table 11). For each type of victimisation which fell under the category 'dating violence', the most common perpetrator was the young person's boyfriend, whilst 'girlfriends' and individual's the young person had 'been on a date with' were rarely the perpetrators (Table 12).

¹⁸ Those young people who seemingly answered for more than just the last time they were emotionally bullied reported significantly more emotional bullying by a stranger and a known person than those who answered for just the last event.

Table 11

Relationship of the Perpetrator to the Victim (excluding dating violence) for lifetime victimisation (N=730).

	Perpetrator relationship (N) %				
	Stranger	Known person	Boyfriend/ girlfriend	Unknown	Missing
Property victimisation^a	(49) 17.5	(166) 69.3	(5) 1.9	(48) 12.9	
Theft	(31) 21.8	(65) 45.8	(3) 2.1	(43) 30.3	0
Vandalism	(4) 6.1	(63) 95.5	0	(1) 1.5	1
Robbery	(14) 24.6	(38) 66.7	(2) 3.5	(4) 7.0	0
Physical victimisation^a	(48) 41	(181) 59.9	0	0	
Assault	(30) 16.3	(159) 86.4	0	0	0
Bias attack	(5) 20.0	(20) 80.0	0	0	1
Kidnap/attempted kidnap	(13) 86.7	(2) 13.3	0	0	0
Peer victimisation^a	(42) 10.5	(377) 83.5	(9) 2.5	(19) 5.5	
Emotional bullying	(21) 8.4	(229) 92	(2) 0.8	0	3
Bullying	(10) 13.5	(63) 85.1	(1) 1.4	0	0
Internet/mobile phone harassment	(11) 9.5	(85) 73.3	(6) 5.2	(19) 16.4	0
Sexual victimisation^a	(48) 28.9	(75) 57.0	(19) 14.2	(6) 2.6	
Non-contact sex	(13) 37.1	(21) 60	(1) 2.9	0	0
Contact sex	(2) 6.5	(20) 64.5	(8) 25.8	0	1
Internet/mobile phone sexual harassment	(33) 42.9	(34) 44.2	(10) 13	(6) 7.8	0

Note: Percentages are based on young people who answered the question and the number of missing answers is presented. Some of the percentages equal more than 100% as some young people gave answers for more than one event.

^aThe percentage for each sub-category of victimisation has been calculated by averaging the percentages for the victim types constituting these categories.

Table 12

Relationship of the Perpetrator to the victim for each type of victimisation under the category 'Dating Violence' over the lifetime (N=730).

	Perpetrator relationship (N) %			
	Boyfriend	Girlfriend	Male on a date	Female on a date
Dating emotional violence	(13) 72.2	(3) 16.7	(1) 5.6	(1) 5.6
Dating physical violence	(9) 69.2	(2) 15.4	(1) 7.7	(1) 7.7
Contact sexual victimisation ^a	(6) 75	(2) 25		
Non-contact sexual victimisation ^a	(1) 100	0		
Internet/mobile phone sexual harassment ^{ab}	(8) 88.9	(1) 11.1		

Note: Percentages are based on young people who answered the question and the number of missing answers is presented. Some of the percentages equal more than 100% as some young people gave answers for more than one event.

^aFigures on sexual victimisation have been added into this table to provide a more complete overview of dating violence which can be compared with the NSPCC's (Radford et al., 2013) findings. Questions on sexual victimisation did not ask whether the perpetrator was a 'male/ female on a date'. Sexual victimisation has not been included in the category of dating violence elsewhere.

^bOne young person did not provide information on the gender of the 'boyfriend/girlfriend'.

With the exception of emotional bullying, young people were most commonly victimised by just one other individual¹⁹ (see Table 13). Emotional bullying tended to be fairly equally perpetrated by one, two and three or more young people²⁰. There was variation in the age groups of perpetrators according to the type of victimisation explored. Bullying was predominantly perpetrated by people in the same school year as the victim (70.7%)²¹, whilst sexual victimisation and dating violence were predominantly perpetrated by people older than the victim (62.1% and 51.9%, respectively) (see Table 14). Very few cases were identified in which the perpetrator was younger than the victim for any of the victimisation types explored²².

¹⁹ Those young people who seemingly answered for more than just the last time they suffered internet based/ mobile phone harassment reported significantly more harassment by two perpetrators than those who answered for just the last event.

Those young people who seemingly answered for more than just the last time they suffered internet based/ mobile phone sexual harassment reported significantly less harassment by one perpetrator than those who answered for just the last event.

²⁰ Those young people who seemingly answered for more than just the last time they were emotionally bullied reported significantly more emotional bullying by a group of three or more young people than those who answered for just the last event.

²¹ Those young people who seemingly answered for more than just the last time they suffered bullying reported significantly less bullying by same-aged perpetrators than those who answered for just the last event.

²² Those young people who seemingly answered for more than just the last time they suffered an assault reported significantly more assault by younger perpetrators than those who answered for just the last event.

Table 13

Number of Perpetrators Committing Different Types of Extrafamilial Victimization Against Young People for lifetime victimisation (N=730).

	Number of perpetrators (N) %			
	One	Two	Three or more	Unknown
Property victimisation^a	53.0	16.7	12.5	16.9
Theft	(55) 39.0	(14) 9.9	(6) 4.3	(60) 42.6
Vandalism	(45) 68.2	(10) 15.2	(9) 13.6	(3) 4.5
Robbery	(29) 51.8	(14) 25.0	(11) 19.6	(2) 3.6
Physical victimisation^a	58.8	16.3	25.1	0
Assault	(131) 71.2	(25) 13.6	(29) 15.8	0
Bias attack	(10) 38.5	(4) 15.4	(12) 46.2	0
Kidnap/ attempted kidnap	(10) 66.7	(3) 20.0	(2) 13.3	0
Peer victimisation^a	44.5	22.8	25.5	6.9
Emotional bullying	(84) 33.6	(67) 26.8	(97) 38.8	0
Bullying	(39) 53.4	(14) 19.2	(20) 27.4	0
Internet/ mobile phone harassment	(54) 46.6	(26) 22.4	(12) 10.3	(24) 20.7
Sexual victimisation^a	80.5	6.0	5.8	5.2
Non-contact sex	(29) 82.9	(2) 5.7	(3) 8.6	0
Contact sex	(27) 87.1	(1) 3.2	(2) 6.5	0
Internet/ mobile phone sexual harassment	(55) 71.4	(7) 9.1	(4) 5.2	(12) 15.6

^aThe percentage for this sub-category of victimisation has been calculated by taking the average percentage for the victim types constituting these categories.

Table 14

Age of Perpetrator of Extrafamilial Victimisation Against Young People for lifetime victimisation (N=730)

	Age group of perpetrator (N) %			
	Same school year	Older	Younger	Unknown
Property victimisation^a	45.1	31.8	7.7	17.5
Theft	(54) 38.3	(26) 18.4	(8) 5.7	(53) 37.6
Vandalism	(38) 57.6	(19) 28.8	(8) 12.1	(4) 6.0
Robbery	(22) 39.3	(27) 48.2	(3) 5.4	(5) 8.9
Physical victimisation^a	40.2	55.0	6.6	4.4
Assault	(116) 63	(66) 35.9	(15) 8.2	0
Bias attack	(15) 57.7	(11) 42.3	(3) 11.5	0
Kidnap/ attempted kidnap	0	(13) 86.7	0	(2) 13.3
Bullying^a	70.7	26.0	2.7	8.0
Emotional bullying	(209) 83.6	(55) 22.0	(11) 4.4	0
Bullying	(46) 63.0	(26) 35.6	(2) 2.7	0
Internet/ mobile phone harassment	(74) 65.5	(23) 20.4	(1) 0.9	(27) 23.9
Sexual victimisation^a	31.3	62.1	0.5	6.1
Non-contact sex	(15) 42.9	(19) 54.3	0	0
Contact sex	(7) 28.8	(21) 71.0	0	0
Internet/ mobile phone sexual harassment	(74) 22.1	(23) 61.0	(1) 1.3	(27) 18.2
Dating violence^a	48.1	51.9	0	0
Dating emotional violence	(9) 50.0	(9) 50.0	0	0
Dating physical violence	(6) 46.2	(7) 53.8	0	0

Note: Some of the percentages do not equal 100 as some young people gave answers for more than one event and some young people did not answer the question

^aThe percentage for this sub-category of victimisation has been calculated by taking the average percentage for the victim types constituting these categories.

4.3. Gender differences in the prevalence and characteristics of extrafamilial victimisation.

Chi-square analyses revealed that males and females experiences of extrafamilial victimisation (overall and direct and indirect victimisation explored separately) did not significantly differ in the PY or over the LT (see Table 10). Looking at gender differences in the prevalence of victimisation modules, young males experienced a significantly higher rate of conventional crime than females over the LT and PY. There were no significant differences between males and females for any of the other categories of victimisation.

The gender of the perpetrator differed according to victim gender and the type of victimisation being explored (see Figures 2 and 3). Significant chi-square results supported the prediction that offences which are commonly associated with perpetrators who are the opposite gender to the victim (e.g., dating violence and sexual victimisation²³) are more often perpetrated by members of the opposite gender for males and females, and that peer victimisation would be perpetrated more often by members of the same gender. Physical assault and property victimisation were also found to be perpetrated by males more than females when the victim was male, yet the perpetrators' gender was fairly mixed when the victim was female.

²³ Note: Four young people (12.9%) did not answer the question on the gender of the perpetrator and the data were included in the analysis as 'missing'.

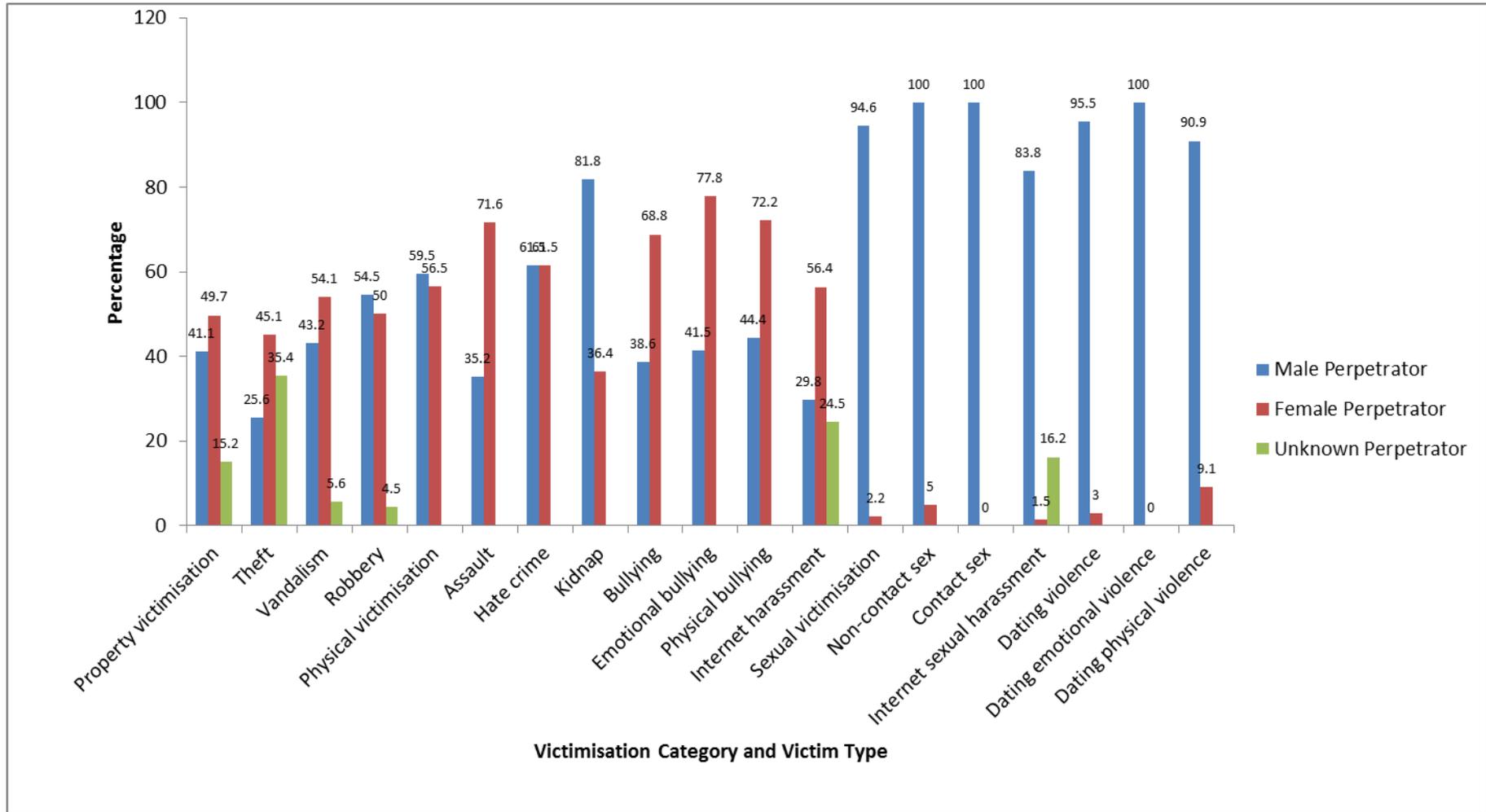


Figure 2. Perpetrator Gender for Victimisation (categories and types) Against Young Females across the lifetime.

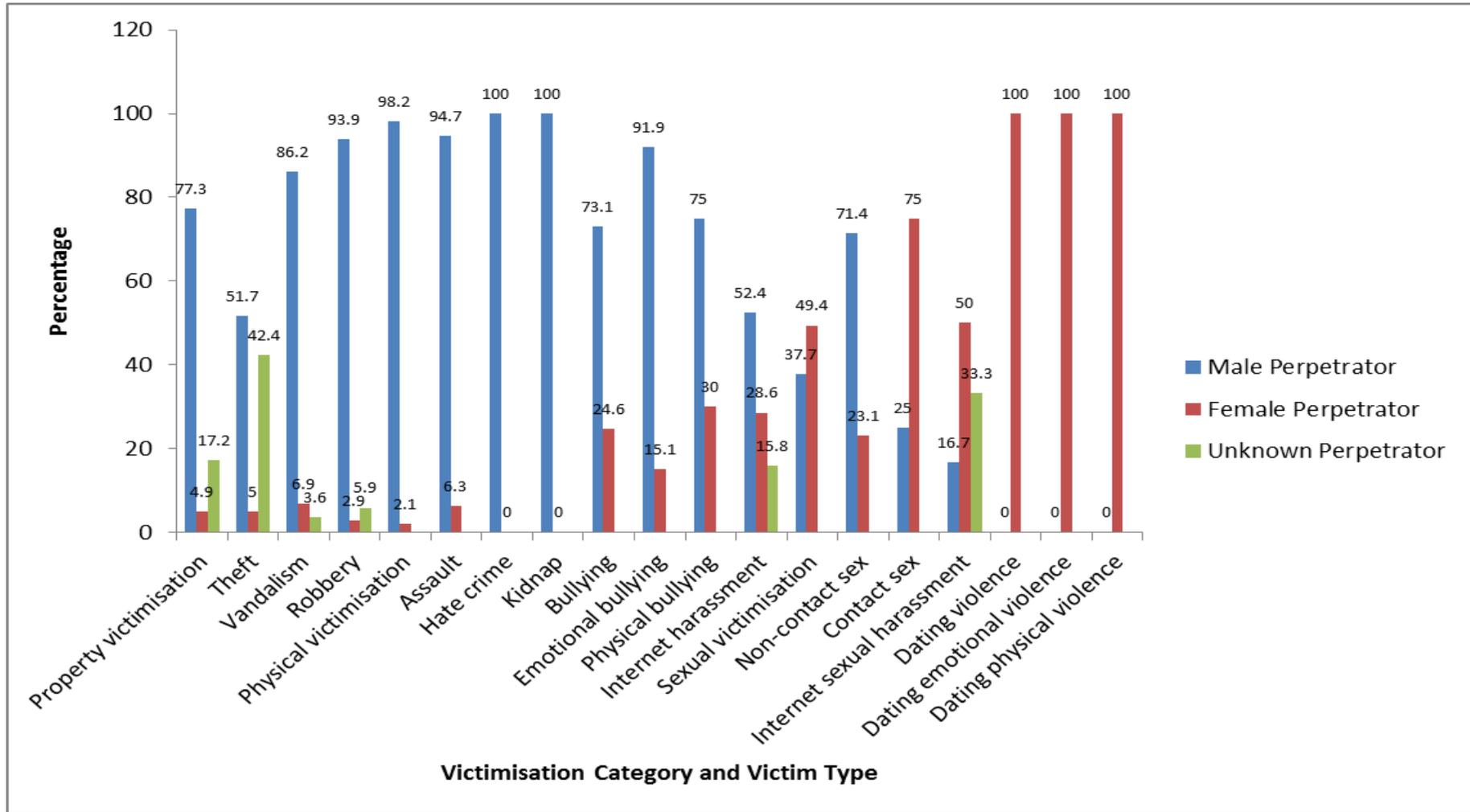


Figure 3. Perpetrator Gender for Victimization (categories and types) Against Young Males across the lifetime

4.4. Multiple and cumulative extrafamilial victimisation.

Analysis of the data supported the hypothesis that extrafamilial victimisation is rarely a one-off event over the LT and PY. Additionally, the hypothesis that young people tend to experience multiple episodes of the same type, as well as different types, of extrafamilial victimisation was also supported (see Table 15).

The vast majority of LT victims were victimised more than once over their lifetime and the findings show how young people tend to experience different categories of victimisation (e.g., bullying and sexual victimisation), rather than victimisation types mainly within one main category (e.g., theft and robbery). The picture was slightly different for PY victimisation²⁴, but it was again found to be more common for young people to have been victimised more than once and to experience different categories of victimisation within a shorter timeframe (PY) as well as over the LT.

Looking at chronic victimisation (repeated victimisation of the same type/category), young people appear to experience all categories of victimisation more than once. Bullying was repeated the most with young people reporting an average of 2.6 experiences over their LT. This was followed by physical victimisation (2.2 experiences) and sexual victimisation (2.2), dating violence (2.1) and property victimisation (1.9).

²⁴ An aggregate PY victimisation score was not calculated for young people who answered positively to one or more victimisation screener questions but did not state when the incident occurred (PY or LT) as any figure assigned would represent an estimate. In such cases, the PY aggregate victimisation score data were classified as 'missing'.

Table 15

Multiple extrafamilial victimisation across the LT (N= 614) and in the PY (474)

	Lifetime victimisation			Past year victimisation		
	N	%	95% CI (±)	N	%	95% CI (±)
Victimised more than once	460	74.9	6.00	290	61.2	8.75
Experienced just one type of victimisation	154	25.1	6.00	184	38.8	8.75
	N	Range	95% CI (±)	N	Range	95% CI (±)
Average number of different victimisation types experienced	2.8	0-14	0.24	1.7	0-7	0.31
Average number of victimisation categories experienced	2.2	1-6	0.33	1.4	0-5	0.24

4.4.1. Poly-victimisation.

Using the pre-defined classification criteria, 14% of young people ($N = 102$, 95% CI= 4.69) were classified as LT poly-victims and 23.4% were classified as PY poly-victims ($N = 165$, 95% CI= 7.51). Not all LT poly-victims were PY poly-victims, and vice versa. In total, 78.2% of LT poly-victims were also classed as PY poly-victims.

Analysis also shows how poly-victims are significantly more likely to have suffered more serious types of victimisation including an assault, bias attack, physical dating violence (see Tables 16 and 17). No significant differences were found between the groups in relation to kidnap/attempted kidnap, yet this is likely to be related to its small prevalence within this sample. Differences in the prevalence of contact sexual assault could not be calculated as between-component variance was negative and therefore the ICC could not be calculated to control for clustering.

Table 16

Percentage of LT Poly-victims and LT Lower-level Victims (non-poly) Experiencing Serious Types of Victimization

	Lifetime poly-victims vs. lifetime non-poly-victims									
	Lifetime victimisation (%)					Past-year victimisation (%)				
	LT victims		LT Poly-victims		χ^2_a	LT Victims		LT Poly-victims		χ^2_b
N	%	N	%	N		%	N	%		
Assault	121	23.9	64	64.6	14.71***	69	13.7	41	41	9.53**
Bias attack	11	2.2	15	15.3	14.73***	6	1.2	6	5.9	5.92
Dating physical	5	0.8	8	8.1	12.23***	2	0.4	8	7.8	17.45***
Kidnap/attempted kidnap^c	10	2.0	5	5.1	1.10	1	0.2	1	1.0	1.19

^aAnalysis based on 604-609 participants.

^bAnalysis based on 605-609 participants.

^cNon-significant finding is most likely related to small prevalence rates for this type of victimisation.

Note: 95% confidence interval widths (CI) and chi-square statistics have been adjusted for clustering
 ** $p < 0.01$, *** $p < 0.001$ (2-tailed).

Table 17

Percentage of PY Poly-victims and PY Lower-level Victims (non-poly) Experiencing Serious Types of Victimization

	Past-year poly-victims vs. past-year non-poly-victims									
	Lifetime victimisation (%)					Past-year victimisation (%)				
	PY victims		PY Poly-victims		χ^2 a	PY victims		PY Poly-victims		χ^2 b
	N	%	N	%		N	%	N	%	
Assault^a	96	23	87	53.4	13.89***	42	10	68	41.7	21.29***
Bias attack^e	12	2.8	13	8.1	5.18	3	0.7	9	5.5	8.84**
Dating physical	4	1.0	9	5.6	8.40**	1	0.2	9	5.5	13.09***
Kidnap/ attempted kidnap^c	10	2.4	4	2.5	0.007	1	0.2	1	0.6	0.32

^aAnalysis based on 577-582 participants.

^bAnalysis based on 581-589 participants.

^cNon-significant finding is most likely related to small prevalence rates for this type of victimisation.

Note: 95% confidence interval widths (CI) and chi-square statistics have been adjusted for clustering.

** $p < 0.01$, *** $p < 0.001$ (2-tailed).

The demographic characteristics of LT and PY poly-victims were compared (using chi-square analysis) to LT and PY lower-level victims (non-poly-victims). As can be seen in Table 18, none of the demographic variables differentiated LT or PY poly-victims from LT or PY non-poly-victims.

Table 18

Difference Between LT and PY Poly-victims and Lower-level PY and LT Victims (non-poly-victims)

	LT Victims	LT Poly-victims		PY victims	PY poly-victims	
	(N) %	(N) %	χ^{2a}	(N) %	(N) %	χ^{2b}
Male	(194) 37.9	(30) 29.4	0.12	(124) 40.1	(58) 35.2	0.05
White	(456) 89.6	(88) 86.3	0.57	(276) 89.9	(146) 88.5	0.14
Disability	(12) 2.4	(3) 3.0	0.11	(7) 2.3	(6) 3.7	0.59
Family composition ^c			2.29			4.95
Age (mean) ^d	13.82	13.76	0.18 ^a	13.83	13.76	0.22 ^a

^aAnalysis based on 562-614 participants.

^bAnalysis based on 426-474 participants.

^cOne 2x4 chi-square was carried out to explore differences across the four 'family composition' categories.

^dThis analysis was based on a T-Test (adjusted for clustering), and not Chi-Square.

4.5. Location of extrafamilial victimisation.

Table 19 presents the percentage of each type of victimisation which occurred within the school and outside of the school. As can be seen from this table, the vast majority of extrafamilial victimisation occurred outside of the school (within the wider community). The exception to this was emotional bullying which most commonly occurred within the school²⁵.

Of the young people who were victims, 72.9% (95% CI= 6.67) experienced victimisation within the school, and 71.4% (95% CI= 6.11) in the community. The majority of victims (55.7%) were victimised in just one of the above locations (27.1% experienced all of their victimisation within the school, 28.6% within the community), whilst 44% (95% CI= 4.89) of victims were victimised in the school and the community.

²⁵ Chi-square analysis showed that young people who answered follow-up questions for emotional bullying, theft and bullying in relation to more than just the last event were significantly more likely to report experiencing these types of victimisation within the school than those who answered for just the last event.

Table 19

Location of Extrafamilial Victimisation Against Young People (N=730).

	Location (N) %	
	Outside School	Inside School
Property victimisation^a	61.6	42.6
Theft	(80) 56.7	(64) 45.4
Vandalism	(41) 62.1	(32) 48.5
Robbery	(39) 69.6	(19) 33.9
Physical victimisation^a	70.7	33.5
Assault	(100) 54.6	(86) 47.0
Bias attack	(15) 57.7	(14) 53.8
Kidnap/ attempted kidnap	(15) 100.0	0
Peer victimisation^a	45.3	65.7
Emotional bullying	(86) 34.4	(188) 79.2
Bullying	(41) 55.4	(38) 51.4
Sexual victimisation^a	97.0	3.1
Non-contact sex	(25) 73.5	(10) 29.4
Contact sex	(29) 96.7	(1) 3.3
Dating violence^a	94.2	12.2
Dating emotional violence	(15) 88.3	(3) 16.7
Dating physical violence	(13) 100.0	(1) 7.7

Note: Some of the percentages do not equal 100 as some young people gave answers for more than one event and some young people did not answer the question.

^aThe percentage for this sub-category of victimisation has been calculated by taking the average percentage for the victim types making up these categories.

4.6. Timing and location of school-based victimisation.

Victimisation within the school was explored in more detail to assess the places where young people are most commonly victimised, as well as the timing of victimisation throughout the school day. The locations of school-based victimisation are presented in Table 20 and appear to vary according to the type of victimisation assessed. A large proportion of theft (79.7%), vandalism (100%), contact sexual assault (100%; note that there was only one incident of contact sexual assault occurring within the school) and non-contact sexual victimisation (60%) occurred within the classroom (the latter also tended to occur within school changing rooms; 60%). For robbery (52.6%), bias attack (57.1%), emotional bullying (28.3%) and physical bullying (84.2%), young people reported the playground as the most frequent location in which they were victimised in these ways. Assault appeared to be as likely to occur on the school field (29.1%) as in the classroom (29.1%).

Information given by young people on the timing of school-based extrafamilial victimisation is displayed in Table 21. This concurs with the information reported in relation to location (e.g., victimisation reported to most likely occur within the classroom was reported to most commonly occur during a lesson) and therefore provides some level of validity to these findings.

Table 20

Location of School-Based Direct Extrafamilial Victimization (N=730).

	Location within the school (N) %								
	Classroom	Playground	Field	Around school grounds (outside)	Corridor	Changing rooms	Canteen	'Everywhere'	Toilets
Theft	(51) 79.7	(2) 3.1	(7) 10.9	(1) 1.6	(2) 3.1	(12) 18.8	(1) 1.6	0	(2) 3.1
Vandalism	(32) 100.0	(7) 21.9	(4) 12.5	(3) 9.4	0	0	0	0	0
Robbery	(8) 42.1	(10) 52.6	(2) 10.5	(3) 16.1	(2) 10.5	0	0	0	0
Assault	(25) 29.1	(12) 14.0	(25) 29.1	(11) 12.8	(11) 5.8	(4) 4.7	0	(3) 3.5	(2) 2.3
Bias attack	(2) 14.3	(8) 57.1	0	(3) 21.4	0	0	0	0	0
Kidnap/ attempted Kidnap ^a	-	-	-	-	-	-	-	-	-
Emotional bullying	(42) 21.2	(56) 28.3	(11) 5.6	(15) 7.6	(13) 6.6	0	(4) 2.0	(23) 11.6	0
Bullying	(14) 36.8	(32) 84.2	(5) 13.2	(2) 5.3	(4) 10.5	0	(2) 5.3	(1) 2.6	(2) 5.3
Non-contact sex	(6) 60.0	0	(2) 20.0	0	0	(6) 60.0	(1) 10.0	(2) 20.0	0
Contact sex	(1) 100.0	0	0	0	0	0	0	0	0
Dating emotional violence	0	(1) 100.0	(1) 100.0	(1) 100.0	0	0	0	0	0
Dating physical violence	0	0	(1) 100.0	0	0	0	0	0	0

Note: Some of the percentages do not equal 100 as some young people gave answers for more than one event and some young people did not answer the question.

^aNone of the disclosed incidents of kidnap or attempted kidnap occurred within the school.

Table 21

Timing of School-Based Extrafamilial Victimization (N=730).

	Timing (N) %				
	Before lessons	Break	Lunch	During a lesson	End of school day
Theft	(6) 9.4	(6) 9.4	(20) 31.3	(23) 35.9	(13) 20.3
Vandalism	(3) 9.4	(2) 6.3	(7) 21.9	(17) 53.1	(2) 6.3
Robbery	(2) 10.5	(4) 21.1	(11) 57.9	(2) 10.5	0
Assault	(7) 8.1	(19) 22.1	(47) 54.7	(15) 17.4	(9) 10.5
Bias attack	(1) 7.1	(5) 35.7	(7) 50.0	(2) 14.3	0
Kidnap/ attempted kidnap ^a	-	-	-	-	-
Emotional bullying	(28) 14.1	(80) 40.4	(123) 62.1	(70) 35.4	(23) 11.6
Bullying	(2) 5.3	(15) 39.5	(23) 60.5	(6) 15.8	(4) 10.5
Non-contact sex	(2) 20.0	0	(1) 10.0	(8) 80.0	(1) 10.0
Contact sex	0	0	0	(1) 100.0	0
Dating emotional violence	0	(1) 33.3	(3) 100.0	0	0
Dating physical violence	0	(1) 100.0	(1) 100.0	0	0

Note: Some of the percentages do not equal 100 as some young people gave answers for more than one event and some young people did not answer the question.

^aNone of the disclosed incidents of kidnap or attempted kidnap occurred within the school.

4.7. Timing and location of community-based extrafamilial victimisation.

The locations in which participants reported being victimised within the community were explored according to each type of victimisation. Table 22 displays these findings, revealing how the location of victimisation varied according to type. A high frequency of robbery (66.7%), assault (93%), hate crime (100%), kidnap/ attempted kidnap (100%), physical bullying (80.5%), and non-contact sexual victimisation (80%) occurred within an open outdoor location (e.g., on the street, in a park, etc.). Theft (66.3%), vandalism (100%) and contact sexual assault (72.4%) were mostly reported as occurring within the young person's home, or the home of a family member or friend. However, theft also commonly occurred within an open outdoor space (47.5%). The least common places where victimisation was reported were indoor recreational areas (such as leisure centres, and 'parties'), shops and town centres, and whilst travelling on public transport.

Table 22

Location of Community-Based Extrafamilial Victimization (N=730).

	Location (N) %				
	Home of YP/ Family/friend	Open outdoor location	Indoor recreational location (including a party)	Shops/ town	Public transport
Theft	(53) 66.3	(38) 47.5	(8) 10.0	(10) 12.5	(1) 2.5
Vandalism	(41) 100	(14) 34.1	(3) 7.3	(2) 4.9	0
Robbery	(8) 20.5	(26) 66.7	(6) 15.4	(7) 17.9	(2) 5.1
Assault	(47) 47.0	(93) 93.0	(10) 10.0	(14) 14.0	(6) 6.0
Bias attack	(4) 26.7	(15) 100.0	(2) 13.3	0	0
Kidnap/ attempted kidnap	(2) 13.3	(15) 100.0	0	0	0
Emotional bullying	(11) 12.8	(28) 32.6	(6) 7.0	(5) 5.8	(5) 5.8
Bullying	(4) 9.8	(33) 80.5	(3) 7.3	(9) 22.0	(8) 19.5
Non-contact sex	(12) 48.0	(20) 80.0	0	(2) 8.0	0
Contact sex	(21) 72.4	(8) 27.6	(8) 27.6	0	0
Dating emotional violence	(3) 20.0	(6) 40.0	0	(3) 20.0	0
Dating physical violence	(7) 54.0	(3) 23.0	0	(5) 38.0	0

Note: Some of the percentages do not equal 100 as some young people gave answers for more than one event and some young people did not answer the question.

Victimisation outside of the school was mostly reported as occurring on weekends, evenings, and the journey to and from school. Table 23 shows that the weekend was the most frequent time reported for all types of victimisation. This was with the exception of physical bullying which was reported to be equally prevalent on the journey to and from school, in the evenings, and on a weekend (36.6%, 31.7% and 34.1%, respectively). The evening was the second most prevalent time for victimisation to occur, particularly for vandalism²⁶ (48.8%), assault (34%), and emotional bullying (43%). All types of victimisation were reported by at least one young person in the sample to have occurred on the young person's journey to or from school. However, these figures ranged from 3.4%-36.6% depending on the type of victimisation being assessed. Non-contact sexual victimisation was not reported by any young person to have occurred on the journey to or from school. Additionally, victimisation occurring on holidays and school trips were noted by some young people.

²⁶ Young people who answered these follow-up questions for vandalism in relation to more than just the last time it happened to them were significantly more likely to report vandalism on an evening than those young people who responded only for the last event.

Table 23

Timing of Community-Based Extrafamilial Victimization (N=730).

	Timing (N) %			
	Journey To/ From School	Evening	Weekend	Holiday/ school trip
Theft	(7) 8.8	(14) 17.5	(46) 57.5	(8) 10.0
Vandalism	(2) 4.9	(20) 48.8	(21) 51.2	0
Robbery	(8) 20.5	(9) 23.1	(16) 41.0	(1) 2.6
Assault	(19) 19.0	(34) 34.0	(48) 48.0	0
Bias attack	(3) 20.0	(3) 20.0	(8) 53.3	(1) 13.3
Kidnap/ attempted kidnap	(3) 20.0	(3) 20.0	(8) 53.3	(2) 13.3
Emotional bullying	(16) 18.6	(37) 43.0	(44) 51.2	0
Bullying	(15) 36.6	(13) 31.7	(14) 34.1	(1) 2.4
Non-contact sex	0	(7) 28.0	(20) 80.0	0
Contact sex	(1) 3.4	(6) 20.7	(18) 62.1	(2) 8.0
Dating emotional violence	(1) 7.0	(5) 33.0	(10) 67.0	0
Dating physical violence	(1) 8.0	(5) 38.0	(7) 54.0	0

Note: Some of the percentages do not equal 100 as some young people gave answers for more than one event and some young people did not answer the question.

In total, 64 (8.8%) young people were directly victimised on their journeys to or from school: 10 (1.4%) on the way to school and 57 (7.8%) on the way home²⁷. Table 23 displays the percentage of each victimisation type which occurred on the journey to or from school. The most common type of victimisation to occur on this journey was physical bullying (36.6%) whilst none of the young people's last reported experiences of non-contact sexual victimisation occurred on one of these journeys.

4.8. Geographical victimisation 'hotspots'

Figure 4 presents a map of the three secondary schools (one coeducational school, one girls' grammar school and one boys' grammar school) in one participating town. This map shows the locations where the participating young people from these schools reported being victimised in the community within the past year. The location of each school is circled and the victimisation reported by young people from each school is presented in a different colour.

As can be seen in Figure 4, two main geographical clusters of victimisation were identified from the combined data from all three schools. These clusters cover the town centre (close to the boys' school) and encompass each of the schools' locations. The cluster on the left contains the girls' grammar school and the coeducational school. As a result, there appears to be a lot of the victimisation experienced by the young people attending these two schools concentrated here (52.8% and 23.8%, respectively). Only one reported episode from a pupil attending the boys' school occurred within this cluster (5.6%). This suggests that the males

²⁷ The combined figures for the number of young people victimised on the journey to school and the journey home from school equals 67. This is because three young people reported being victimised on the journey to school as well as the journey home from school.

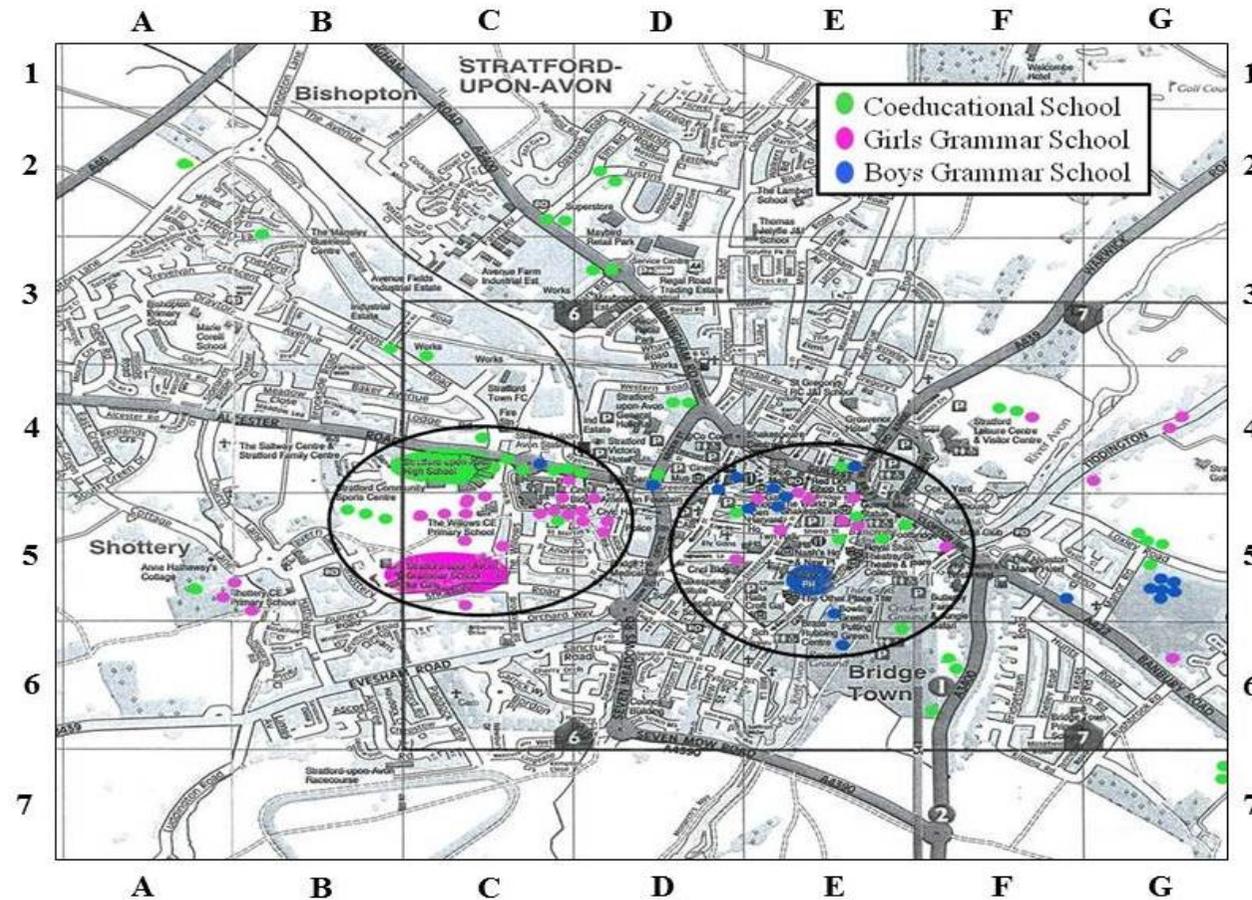


Figure 4. Map displaying the location of extrafamilial victimisation for participants attending all three secondary schools within one town. Each colour represents the victimisation for each school and the two black circles highlight the largest two victimisation clusters across schools.

at this single-sex grammar school do not tend to be victimised close to the coeducational school or girl's grammar school.

The cluster on the right encompasses only the boy's grammar school, yet the victimisation experienced by pupils attending all three schools is present within this cluster (50% of the boys' school's victimisation, 25% of the girls' school's victimisation, and 16.7% of the coeducational school's victimisation). It must be noted, however, that the boys' school is more closely situated towards the town centre which may be accountable for this pattern. Smaller clusters of victimisation can be identified on the outskirts of these two main hotspots.

The locations in which young people were victimised differed according to the school they attended. In particular, there appears to be a contrast between the locations for the two single-sex schools versus the coeducational school. The pattern of victimisation for males and females attending the coeducational school ($N= 65$, displayed in green on Figure 4) is widely dispersed across the whole town (identified in grid-points A – G, 1 – 7 of the map) with few identifiable clusters of victimisation. For young people attending the coeducational school, 59.5% of the victimisation fell outside of the two main clusters, 23.8% within the cluster on the left (which encompassed the coeducational school), and 16.7% in the cluster on the right.

For the males ($N= 44$, displayed in blue in Figure 4) and females ($N= 105$, displayed in pink in Figure 4) attending the two single-sex grammar schools, victimisation was not so widely dispersed and tended to be fairly neatly clustered around each school. For males, 44.4% of their victimisation experiences fell outside of the two main clusters, 5.6% within the cluster on the left, and 50% within the cluster on the right (which encompassed the boys' single-sex school; grid points C –

G, 4 – 6 on the map). For young people attending the girls' school, 22.2% fell outside of the two main clusters, 52.8% within the cluster on the left (which encompassed the girls' school) and 25% within the cluster on the right (grid points A – G, 4 – 6). There was also a contrast between the young people at both of the single-sex schools; the victimisation of males at the grammar school appears to be less dispersed than that for females attending the grammar school.

As noted, the boys' school was located closer to the town centre so the movement of these young people may be expected to be more localised than young people at the other two schools, who may need to travel to the town centre to catch a bus. It is also possible that the differences in the dispersion of victimisation on these maps may reflect the proximity in which young people live to their school.

Coeducational schools are open to all young people within the local school catchment area and pupils are therefore more likely to live within the immediate geographical neighbourhoods. Grammar schools are not so openly accessible, requiring the passing of an entry selection test, and therefore take in pupils from a wider catchment area that perform at a certain intellectual level. It may be expected, therefore, that the travel and movements of these young people within the communities surrounding the school will differ and have an effect on the representation of their victimisation on the map.

This theory was explored in more detail by looking at the way in which young people travel to and from these schools, which is likely to indicate how far away they live (see Tables 24 and 25). Note that this analysis did not need adjusting to account for clustering as it was exploring differences between the three schools, not patterns in the combined data.

Table 24

Way in Which Participants Travelled to School within Each of the Three Secondary Schools (N= 214).

School	Walk ^a			Cycle ^b			Bus ^c			Car ^d			Other ^e		
	N	%	z- score	N	%	z- score	N	%	z- score	N	%	z- score	N	%	z- score
Boys' grammar	4	9.1	-2.5**	0	0	-0.9	34	77.3	1.6	7	15.9	-1.9	0	0	-1.2
Girls' grammar	23	21.9	-1.4	1	1	-0.7	68	64.8	0.9	33	31.4	-0.2	5	4.8	0.8
Coeducational	35	53.8	3.9***	3	4.6	1.6	23	35.4	-2.4	30	46.2	1.9 [†]	2	3.1	-0.1

Note: five separate 3x2 chi-square analyses were carried out based on each mode of transport. Groups were independent in that each young person appeared in only one cell of each table based on their answer to the journey questionnaire stating whether they ever travelled to school using each mode of transport (yes/no).

^a $\chi^2(2) = 32.45, p < 0.001$.

^b $p = 0.136$ (Fishers exact was used as 50% cells had expected count less than 5).

^c $\chi^2(2) = 22.37, p < 0.001$.

^d $\chi^2(2) = 11.06, p < 0.01$.

^e $p = 0.412$ (Fishers exact was used as 50% cells had expected count less than 5).

** $p < 0.01$, *** $p < 0.001$ (2-tailed)

Table 25

Way in Which Participants Travelled Home from School Within Each of the Three Secondary Schools (N=214).

School	Walk ^a			Cycle ^b			Bus ^c			Car ^d			Other ^e		
	N	%	z- score	N	%	z- score	N	%	z- score	N	%	z- score	N	%	z- score
Boys' grammar	4	9.1	-2.5**	0	0	-0.9	34	77.3	1.7	8	18.2	-1.1	0	0	-1.1
Girls' grammar	22	21	-1.5	1	1	-0.7	65	61.9	0.6	32	30.5	0.7	5	4.8	1.2
Coeducational	36	55.4	4***	3	4.6	1.6	24	36.9	-2.2	18	27.7	0.1	1	1.5	-0.6

Note: five separate 2x2 chi-square analyses were carried out based on each mode of transport. Groups were independent in that each young person appeared in only one cell of each table (2x2 analysis) based on their answer to the journey questionnaire stating whether they ever travelled home from school using each mode of transport (yes/no).

^a $\chi^2(2) = 33.76, p < 0.001$.

^b $p = 0.136$ (Fishers exact was used as 50% cells had expected count less than 5).

^c $\chi^2(2) = 19.13, p < 0.001$.

^d $\chi^2(2) = 2.39, p = 0.317$.

^e $p = 0.342$ (Fishers exact was used as 50% cells had expected count less than 5).

** $p < 0.01$, *** $p < 0.001$ (2-tailed)

Chi-square analysis revealed a significant difference in the amount of young people who walked to school. Looking at the standardised residuals²⁸ to explore where these differences were found, males at the grammar school were significantly less likely to walk to school (9.1%, $z = -2.5$) and from school (9.1%, $z = -2.5$) than males and females attending the coeducational school (53.8% walk to school, $z = 3.9$ and 55.4% walk home from school, $z = 4.0$). This suggests those young people attending the coeducational school live close enough to be able to walk to school compared to those attending the boys' grammar school and the girl's grammar school (although the latter did not reach significance). Their physical movements are therefore more likely to cover a larger area of the map, including their home neighbourhoods, which may explain why they have the larger, more dispersed pattern of victimisation seen on the map.

This theory raised the possibility that the over-representation of the coeducational school pupils' victimisation on the map may indicate a higher level of victimisation on their journeys to and from school. To test this, the amount of victimisation experienced on the journey to and from school was statistically compared (Kruskal- Wallis) between the three schools. No significant differences were found between the aggregate total amount of victimisation experienced ($H(2) = 0.68, p = 0.715$), aggregate direct victimisation ($H(2) = 0.26, p = 0.870$), and aggregate indirect victimisation ($H(2) = 2.1, p = 0.354$) for young people within the three different schools. These findings therefore suggest that it is not the young person's journey to and from school which accounts for the differences in the geographical distribution of victimisation on the map. A possible reason for this may

²⁸ Standardised residual represent z- scores. Z-scores greater than 1.96 are significant at $p > 0.05$, z-scores greater than 2.58 are significant at $p > 0.01$, and z-scores greater than 3.29 are significant at $p > 0.001$.

be that young people are equally as likely to be victimised on the school bus as they are when walking to or from school.

4.9. Characteristics of the journey home from school.

Chi-square analysis revealed no significant differences between young people who were victimised on the way home from school and those who were not on the mode of transport used for these journeys. Additionally, no significant differences were found between young people who walked or cycled home from school and were or were not victimised based on whether any stops were made on this journey and whether they completed the journey alone or with friends (see Tables 26 and 27). However, the differences in group sizes for these chi-square analyses should be noted when interpreting these findings.

Table 26. Chi-Square Analysis Comparing Young People who Were Victimised on the Journey Home From School With Those who Were not Victimised on the Journey Home, Based on the Way They Travel Home From School (n=710).

Transport home from school	Victimised on the journey home from school		Not victimised on the journey home from school		χ^2
	<i>N</i>	%	<i>N</i>	%	
^a Walk	25	45.5	302	46.1	0.20
^a Cycle	4	3.0	35	5.3	0.14
^a Bus	25	45.5	251	38.3	0.07
^a Lift in a car	12	21.8	150	22.9	0.19

Note: chi-squares and 95% CIs have been adjusted for clustering.

Table 27. Chi-Square Analysis Comparing the Journeys of Young People who Walked or Cycled Home From School and Were Victimised on This Journey, to Those who Walked or Cycled and Were not Victimised on This Journey ($N=346$).

Characteristics of the journey home from school	Victimised on the journey home from school		Not victimised on the journey home from school		χ^2
	<i>N</i>	%	<i>N</i>	%	
Young person travelled home with friends for at least half of the journey	21	80.8	224	80.0	0.003
Young person made one or more stop	11	42.3	107	34.9	0.22

Note: chi-squares and 95% CIs have been adjusted for clustering.

4.10. Routine activities in relation to the school day

Participation in after-school activities and whether the parent/guardian was home when the young person arrived home from school were not found to significantly increase the odds of the young person being victimised within the community (see Table 28).

Table 28.

Logistic regression analysis exploring the odds of being victimised in the community based on variables relating to the end of the school day (n=597).

Variables relating to the end of the school day	Victims	Non-victims	Model 1		
	% (N)	% (N)	OR	95% CI	P
Parent's always/often at home when young person arrives home from school	71 (292)	71.9 (194)	1.05	0.73- 1.53	.790
<i>Parents not/ very rarely at home when young person arrives home from school</i>			1		
Participates in a structured after-school activity	50.1 (189)	48.4 (118)	0.95	0.67- 1.35	.778
<i>Does not participate in a structured after school activity</i>			1		

Cox & Snell R Square= 0.035

OR= odds ratio, CI= confidence interval

Note: Seven school dummy variables were entered in the first model to control for school level clustering and one out of seven of these schools had a significant positive relationship with the outcome.

4.11. Routine activities and victimisation in the community.

Of the total sample, 434 young people (61%) were victimised in the community²⁹ and experienced an average of 1.6 different types of community-based victimisation. Findings from the multiple linear regression analysis are presented in Table 29. A history of the young person being in trouble with the police and having friends who were in trouble with the police, significantly predicted higher aggregate levels of victimisation within the community. These variables accounted for 11% of the variance of community-based victimisation in the first step (block) of the model. In the second step, the only significant predictors of higher aggregate levels of community-based victimisation were whether the young person drank alcohol with their friends, the level of parental guardianship they received (significant negative relationship), and whether the young person had been in trouble with the police. Whether the young person saw their friends on a weekend and how often they saw their friends on an evening were not found to be significant predictors of community-based victimisation. Additionally, friends' delinquent activity lost significance as a predictor when the other variables were added. The second step of the model accounted for an additional 4% of the variance of aggregate levels of community-based victimisation. Chi-square analysis revealed no significant differences between victims and non-victims on the places they go with their friends on an evening and weekend (see Table 30).

²⁹ This is based on information given in the follow-up questions on the JVQ for the last time the young person experienced each type of victimisation

Table 29

Social factors and activities in the community as predictors of the Aggregate Amount of Victimization Experienced within the Community

(N=641).

	Model 1				Model 2			
	β	t	Adj. R^2	F	β	t	ΔR^2	F
Ever been in trouble with the police	1.50	5.40***	.107	9.49***	1.18	4.19***	.042	9.25***
Friend's ever been in trouble with the police	0.65	3.32***			0.27	1.31		
Ever drink alcohol					0.73	3.89***		
Guardianship					-0.20	-3.31***		
See friends on a weekend					0.58	1.26		
How many weekday evenings see friends					-0.03	-0.46		
Model adjusted R^2							.143	

*** $p < .001$

Note: Seven school dummy variables were entered in the first model to control for school level clustering and one out of seven of these schools had a significant negative relationship with the outcome.

Table 30. Chi-Square Analysis Comparing Young People who Were Victimised in the Community With Those who Were not Victimised in the Community, on the Locations They go With Friends ($N=698$).

Location	Victimised in the community		Not victimised in the community		χ^2
	<i>N</i>	%	<i>N</i>	%	
Friends' house	302	70.7	197	72.7	0.09
Young person's own house	231	54.1	147	54.2	0.15
Outdoor recreational area (e.g., park)	285	66.7	166	61.3	0.02
Indoor recreational area (e.g., leisure centre)	195	45.7	119	43.9	0.10
Planned activity	11	2.6	9	3.3	0.11
Town centre	66	15.5	46	17	0.10
'Shopping'	18	4.2	15	5.5	0.08

Note: chi-square analyses and 95% CIs have been adjusted for clustering.

4.12. The impact of extrafamilial victimisation on psychological well-being

4.12.1. Impact of different categories of victimisation.

Each category of victimisation (property, physical, bullying, dating violence sexual and indirect) was explored for its ability to predict outcome (score) on each of the five sub-scales on the TSCC-A (anxiety, depression, anger, PTS, and dissociation). As can be seen in Table 31, physical victimisation predicted all outcomes prior to and after the addition of PY and LT poly-victimisation to the model, except for dissociation which lost significance following the addition of poly-victimisation. Bullying significantly predicted depression, anxiety and PTS, but did not predict anger and only predicted dissociation prior to the addition of poly-victimisation. Additionally, sexual victimisation significantly predicted anger, PTS and dissociation but none of these relationships remained significant when poly-victimisation was added to the model. Sexual victimisation was not found to be a significant predictor of anxiety or depression. Property victimisation and dating victimisation did not significantly predict any TSCC-A outcome and indirect victimisation predicted anger only and lost significance when poly-victimisation was entered into the model.

Table 31. Multiple hierarchical linear regression with school-fixed-effects on the intercept to measure Trauma Symptoms Predicted by Individual LT Victimization Categories (N=641).

Anxiety

	Model 1				Model 2				Model 3				Model 4			
	β	t	Adj. R^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F
Property victimisation	0.95	1.96	.122	8.30***	0.80	1.58	.004	7.42***	0.82	1.62	.002	7.05***	0.83	1.64	.001	6.69***
PY Poly-victimisation					1.58	1.78			1.49	1.67			1.43	1.60		
LT Poly-victimisation					0.08	0.06			0.08	0.06			0.11	0.09		
Social support (SS) ^a									-0.30	-1.18			-0.45	-1.53		
SS x property victimisation													0.54	0.98		
Model adjusted R^2															.124	
Physical victimisation	1.78	3.22***	.122	8.30***	1.64	2.85**	.004	7.42***	1.58	2.74**	.002	7.05***	1.72	2.98**	.009	7.09***
PY Poly-victimisation					1.58	1.78			1.49	1.67			1.48	1.67		
LT Poly-victimisation					0.08	0.06			0.08	0.06			0.16	0.13		
Social support (SS) ^a									-0.30	-1.18			-0.76	-2.48**		
SS x physical victimisation													1.32	2.60**		
Model adjusted R^2															.131	
Bullying	1.50	4.02***	.122	8.30***	1.29	3.21***	.004	7.42***	1.26	3.14**	.002	7.05***	1.26	3.14**	.001	6.66***
PY Poly-victimisation					1.58	1.78			1.49	1.67			1.53	1.72		
LT Poly-victimisation					0.08	0.06			0.08	0.06			0.04	0.03		
Social support (SS) ^a									-0.30	-1.18			-0.49	-1.37		
SS x bullying													0.37	0.75		
Model adjusted R^2															.123	
Dating violence	1.84	1.51	.122	8.30***	1.72	1.39	.004	7.42***	1.62	1.31	.002	7.05***	2.01	1.55	.001	6.70***
PY Poly-victimisation					1.58	1.78			1.49	1.67			1.48	1.66		
LT Poly-victimisation					0.08	0.06			0.08	0.06			0.02	0.02		
Social support (SS) ^a									-0.30	-1.18			-0.35	-1.37		
SS x dating violence													1.19	1.04		
Model adjusted R^2															.124	
Sexual victimisation	1.26	2.11	.122	8.30***	0.92	1.41	.004	7.42***	0.99	1.50	.002	7.05***	0.96	1.43	.000	6.63***
PY Poly-victimisation					1.58	1.78			1.49	1.67			1.49	1.67		
LT Poly-victimisation					0.08	0.06			0.08	0.06			0.12	0.09		
Social support (SS) ^a									-0.30	-1.18			-0.32	-1.20		
SS x sexual victimisation													0.20	0.26		
Model adjusted R^2															.123	
Indirect victimisation	0.42	1.71	.122	8.30***	0.27	0.93	.004	7.42***	0.30	1.03	.002	7.05***	0.30	1.03	.001	6.65***
PY Poly-victimisation					1.58	1.78			1.49	1.67			1.56	1.73		
LT Poly-victimisation					0.08	0.06			0.08	0.06			0.06	0.05		
Social support (SS) ^a									-0.30	-1.18			-0.50	-1.24		
SS x indirect victimisation													0.03	0.64		

Model adjusted R²

.123

^aCentred variable

** $p < 0.01$, *** $p < 0.001$

β , standardised Beta coefficient. t , t-test statistic. ΔR^2 , change in R squared value, F , Model ANOVA statistic

Depression

	Model 1				Model 2				Model 3				Model 4			
	β	t	Adj. R^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F
Property victimisation	0.98	2.09	.185	12.09***	0.78	1.61	.019	11.80***	0.86	1.78	.022	12.54***	0.25	0.39	.000	11.83***
PY Poly-victimisation					3.33	3.93***			3.00	3.58***			3.00	3.58***		
LT Poly-victimisation					-0.94	-0.80			-	-0.82			-	-0.85		
Social support (SS) ^a									0.96				1.00			
SS x property victimisation									-	-			-	-		
Model adjusted R^2									1.03	4.38***			1.00	4.01***		
									-	-0.27			-	-0.27		
													0.19			
															.221	
Physical victimisation	2.54	4.73***	.185	12.09***	2.37	4.28***	.019	11.80***	2.19	4.00***	.022	12.54***	2.25	4.09***	.000	11.83***
PY Poly-victimisation					3.33	3.93***			3.00	3.58***			3.00	3.57***		
LT Poly-victimisation					-0.94	-0.80			-	-0.82			-	-0.79		
Social support (SS) ^a									0.96				0.92			
SS x physical victimisation									-	-			-	-		
Model adjusted R^2									1.03	4.38***			1.22	4.23***		
													0.55	1.15		
															.221	
Bullying^a	1.92	5.27***	.185	12.09***	1.55	4.02***	.019	11.80***	1.45	3.79***	.022	12.54***	1.44	3.78***	.000	11.84***
PY Poly-victimisation					3.33	3.93***			3.00	3.58***			3.07	3.61***		
LT Poly-victimisation					-0.94	-0.80			-	-0.82			-	-0.86		
Social support (SS) ^a									0.96				1.00			
SS x bullying									-	-			-	-		
Model adjusted R^2									1.03	4.38***			1.05	4.40***		
													0.14	0.53		
															.222	
Dating violence	2.38	2.03	.185	12.09***	2.33	1.98	.019	11.80***	1.96	1.69	.022	12.54***	1.55	1.27	.002	11.92***
PY Poly-victimisation					3.33	3.93***			3.00	3.58***			3.01	3.59***		
LT Poly-victimisation					-0.94	-0.80			-	-0.82			-	-0.77		
Social support (SS) ^a									0.96				0.90			
SS x dating violence									-	-			-	-		
Model adjusted R^2									1.03	4.38***			0.97	4.04***		
													1.26			
													-	-1.17		
															.223	

Sexual victimisation	0.55	0.94	.185	12.09***	0.004	0.006	.019	11.80***	0.22	0.35	.022	12.54***	0.25	0.39	.000	11.83***
PY Poly-victimisation					3.33	3.93***			3.00	3.58***			3.00	3.58***		
LT Poly-victimisation					-0.94	-0.80			-	-0.82			-	-0.85		
									0.96				1.00			
Social support (SS) ^a									-	-			-	-		
									1.03	4.38***			1.00	4.01***		
SS x sexual victimisation													-	-0.27		
													0.19			
<i>Model adjusted R²</i>																.221
Indirect victimisation^a	-	-0.10	.185	12.09***	-0.22	-0.81	.019	11.80***	-	-0.43	.022	12.54***	-	-0.42	.000	11.83***
PY Poly-victimisation	0.02				3.33	3.93***			0.12				0.12			
LT Poly-victimisation					-0.94	-0.80			-	-0.82			-	-0.81		
									0.96				0.95			
Social support (SS) ^a									-	-			-	-		
									1.03	4.38***			1.03	4.35***		
SS x indirect victimisation													-	-0.23		
													0.05			
<i>Model adjusted R²</i>																.221

^aCentred variable

** $p < 0.01$, *** $p < 0.001$

β , standardised Beta coefficient. t , t-test statistic. ΔR^2 , change in R squared value, F , Model ANOVA statistic

Note: four of the seven school dummy variables entered into Model 2 had significant negative relationships with dissociation.

Anger

	Model 1				Model 2				Model 3				Model 4			
	β	t	Adj. R^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F
Property victimisation	0.70	1.52	.128	8.72***	0.29	0.61	.028	9.29***	0.32	0.67	.004	8.97***	0.32	0.67	.000	8.43***
PY Poly-victimisation					3.91	4.71***			3.77	4.53***			3.76	4.51***		
LT Poly-victimisation					0.60	0.52			0.60	0.52			0.60	0.52		
Social support (SS) ^a									-	-1.90			-	-1.65		
SS x property victimisation									0.44				0.46	0.05		
<i>Model adjusted R²</i>															.156	
Physical victimisation	2.64	5.04***	.128	8.72***	2.24	4.17***	.028	9.29***	2.16	4.01***	.004	8.97***	2.16	3.99***	.000	8.43***
PY Poly-victimisation					3.91	4.71***			3.77	4.53***			3.77	4.52***		
LT Poly-victimisation					0.60	0.52			0.60	0.52			0.60	0.52		
Social support (SS) ^a									-	-1.90			-	-1.57		
SS x physical victimisation									0.44				0.45	0.02		
<i>Model adjusted R²</i>															.156	
Bullying	0.46	1.31	.128	8.72***	-	-0.24	.028	9.29***	-	-0.35	.004	8.97***	-	-0.35	.000	8.43***
PY Poly-victimisation					0.09				0.13				0.13			
LT Poly-victimisation					3.91	4.71***			3.77	4.53***			3.76	4.51***		
Social support (SS) ^a					0.60	0.52			0.60	0.52			0.60	0.52		
SS x bullying									-	-1.90			-	-1.30		
SS x bullying									0.44				0.43	0.02		
<i>Model adjusted R²</i>															.156	
Dating violence	0.56	0.49	.128	8.72***	0.21	0.18	.028	9.29***	0.06	0.05	.004	8.97***	-	-0.16	.001	8.46***
PY Poly-victimisation					0.19				0.19				0.19			
PY Poly-victimisation					3.91	4.71***			3.77	4.53***			3.77	4.53***		

LT Poly-victimisation					0.60	0.52				0.60	0.52			0.63	0.55		
Social support (SS) ^a										-	-1.90			-	-1.72		
										0.44				0.41			
SS x dating violence														-	-0.69		
														0.74			
<i>Model adjusted R²</i>																	.156
Sexual victimisation	1.77	3.11**	.128	8.72***	0.86	1.40	.028	9.29***	0.96	1.56	.004	8.97***	0.98	1.56	.000	8.43***	
PY Poly-victimisation					3.91	4.71***			3.77	4.53***			3.77	4.52***			
LT Poly-victimisation					0.60	0.52			0.60	0.52			0.57	0.49			
Social support (SS) ^a										-	-1.90			-	-1.72		
										0.44				0.43			
SS x sexual victimisation														-	-0.19		
														0.13			
<i>Model adjusted R²</i>																	.156
Indirect victimisation	0.63	2.73**	.128	8.72***	0.22	0.80	.028	9.29***	0.26	0.98	.004	8.97***	0.26	0.97	.000	8.43***	
PY Poly-victimisation					3.91	4.71***			3.77	4.53***			3.80	4.53***			
LT Poly-victimisation					0.60	0.52			0.60	0.52			0.59	0.51			
Social support (SS) ^a										-	-1.90			-	-1.40		
										0.44				0.53			
SS x indirect victimisation														0.14	0.29		
<i>Model adjusted R²</i>																	.156

^aCentred variable

** $p < 0.01$, *** $p < 0.001$

β , standardised Beta coefficient. t , t-test statistic. ΔR^2 , change in R squared value, F , Model ANOVA statistic

Post-traumatic stress (PTS)

	Model 1				Model 2				Model 3				Model 4			
	β	t	Adj. R^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F
Property victimisation	0.86	1.74	.171	11.85***	0.74	1.43	.006	10.66***	0.76	1.47	.002	10.12***	0.77	1.49	.002	9.61***
PY Poly-victimisation					2.02	2.23			1.91	2.10			1.84	2.02		
LT Poly-victimisation					-	-0.43			-	-0.43			-	-0.39		
					0.54				0.54				0.50			
Social support (SS) ^a									-	-1.36			-	-1.78		
									0.34				0.54			
SS x property victimisation													0.66	1.19		
<i>Model adjusted R²</i>															.176	
Physical victimisation	2.19	3.87***	.171	11.85***	2.08	3.54***	.006	10.66***	2.01	3.42***	.002	10.12***	2.06	3.47***	.001	9.55***
PY Poly-victimisation					2.02	2.23			1.91	2.10			1.91	2.10		
LT Poly-victimisation					-	-0.43			-	-0.43			-	-0.41		
					0.54				0.54				0.51			
Social support (SS) ^a									-	-1.36			-	-1.56		
									0.34				0.49			
SS x physical victimisation													0.41	0.78		
<i>Model adjusted R²</i>															.175	
Bullying	1.82	4.78***	.171	11.85***	1.60	3.91***	.006	10.66***	1.57	3.83***	.002	10.12***	1.57	3.83***	.000	9.52***
PY Poly-victimisation					2.02	2.23			1.91	2.10			1.94	2.12		
LT Poly-victimisation					-	-0.43			-	-0.43			-	-0.45		
					0.54				0.54				0.56			
Social support (SS) ^a									-	-1.36			-	-1.25		
									0.34				0.45			
SS x bullying													0.21	0.42		
<i>Model adjusted R²</i>															.175	
Dating violence	1.89	1.52	.171	11.85***	1.85	1.47	.006	10.66***	1.73	1.37	.002	10.12***	1.78	1.50	.001	9.54***
PY Poly-victimisation					2.02	2.23			1.91	2.10			1.92	2.09		
LT Poly-victimisation					-	-0.43			-	-0.43			-	-0.45		
					0.54				0.54				0.58			
Social support (SS) ^a									-	-1.36			-	-1.46		
									0.34				0.38			
SS x dating violence													0.76	0.65		
<i>Model adjusted R²</i>															.175	
Sexual victimisation	1.51	2.47**	.171	11.85***	1.18	1.76	.006	10.66***	1.26	1.87	.002	10.12***	1.19	1.74	.000	9.53***
PY Poly-victimisation					2.02	2.23			1.91	2.10			1.91	2.09		
LT Poly-victimisation					-	-0.43			-	-0.43			-	-0.36		

					0.54				0.54				0.45			
Social support (SS) ^a									-	-1.36			-	-1.46		
									0.34				0.40			
SS x sexual victimisation													0.42	0.55		
<i>Model adjusted R²</i>																.175
Indirect victimisation	0.51	2.05	.171	11.85***	0.39	1.32	.006	10.66***	0.42	1.44	.002	10.12***	0.42	1.44	.001	9.58***
PY Poly-victimisation					2.02	2.23			1.91	2.10			1.81	1.97		
LT Poly-victimisation					-	-0.43			-	-0.43			-	-0.41		
					0.54				0.54				0.52			
Social support (SS) ^a									-	-1.36			-	-0.06		
									0.34				0.03			
SS x indirect victimisation													-	-0.98		
<i>Model adjusted R²</i>													0.51			.175

^aCentred variable

** $p < 0.01$, *** $p < 0.001$

β , standardised Beta coefficient. t , t-test statistic. ΔR^2 , change in R squared value, F , Model ANOVA statistic

Dissociation

	Model 1				Model 2				Model 3				Model 4			
	β	t	Adj. R^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F	β	t	ΔR^2	F
Property victimisation	0.52	0.95	.112	7.63***	0.30	0.53	.014	7.44***	0.33	0.59	.005	7.22***	0.34	0.60	.000	6.80***
PY Poly-victimisation					3.28	3.29***			3.11	3.11**			3.09	3.08**		
LT Poly-victimisation					-0.77	-0.56			-0.78	-0.56			-0.76	-0.55		
Social support (SS) ^a									-0.53	-1.90			-0.59	-1.79		
SS x property victimisation													0.22	0.36		
<i>Model adjusted R²</i>															.126	
Physical victimisation	1.71	2.73**	.112	7.63***	1.52	2.35	.014	7.44***	1.42	2.19	.005	7.22***	1.45	2.23	.000	6.81***
PY Poly-victimisation					3.28	3.29***			3.11	3.11**			3.11	3.12**		
LT Poly-victimisation					-0.77	-0.56			-0.78	-0.56			-0.76	-0.55		
Social support (SS) ^a									-0.53	-1.90			-0.64	-1.86		
SS x physical victimisation													0.31	0.55		
<i>Model adjusted R²</i>															.126	
Bullying	1.44	3.42***	.112	7.63***	1.07	2.38	.014	7.44***	1.02	2.28	.005	7.22***	1.02	2.28	.000	6.81***
PY Poly-victimisation					3.28	3.29***			3.11	3.11**			3.15	3.14**		
LT Poly-victimisation					-0.77	-0.56			-0.78	-0.56			-0.81	-0.58		
Social support (SS) ^a									-0.53	-1.90			-0.68	-1.71		
SS x bullying													0.29	0.53		
<i>Model adjusted R²</i>															.126	
Dating violence	2.35	1.71	.112	7.63***	2.27	1.64	.014	7.44***	2.08	1.50	.005	7.22***	1.58	1.09	.002	6.89***
PY Poly-victimisation					3.28	3.29***			3.11	3.11**			3.13	3.13**		
LT Poly-victimisation					-0.77	-0.56			-0.78	-0.56			-0.71	-0.51		
Social support (SS) ^a									-0.53	-1.90			-0.46	-1.62		
SS x dating violence													-1.53	-1.19		
<i>Model adjusted R²</i>															.127	
Sexual victimisation	1.90	2.80**	.112	7.63***	1.34	1.82	.014	7.44***	1.46	1.97	.005	7.22***	1.56	2.08	.001	6.83***
PY Poly-victimisation					3.28	3.29***			3.11	3.11**			3.12	3.12**		
LT Poly-victimisation					-0.77	-0.56			-0.78	-0.56			-0.91	-0.65		
Social support (SS) ^a									-0.53	-1.90			-0.45	-1.52		
SS x sexual victimisation													-0.65	-0.77		
<i>Model adjusted R²</i>															.126	
Indirect victimisation	0.53	1.94	.112	7.63***	0.32	0.99	.014	7.44***	0.38	1.16	.005	7.22***	0.38	1.16	.000	6.79***
PY Poly-victimisation					3.28	3.29***			3.11	3.11**			3.11	3.08**		
LT Poly-victimisation					-0.77	-0.56			-0.78	-0.56			-0.78	-0.56		
Social support (SS) ^a									-0.53	-1.90			-0.51	-1.11		
SS x indirect victimisation													-0.04	-0.06		
<i>Model adjusted R²</i>															.126	

^aCentred variable

****** $p < 0.01$, ******* $p < 0.001$

β , standardised Beta coefficient. t , t-test statistic. ΔR^2 , change in R squared value, F , Model ANOVA statistic

Note: two of the seven school dummy variables entered into Model 2 had significant negative relationships with dissociation.

4.12.2. The impact of poly-victimisation.

Past year (PY) poly-victimisation significantly predicted anger, depression and dissociation, but did not significantly predict anxiety or PTS (see table 31). PY poly-victimisation also accounted for the relationship between sexual victimisation and anger, PTS and dissociation, as well as that between bullying and physical victimisation and dissociation, and indirect victimisation and anger. LT poly-victimisation was not found to have a significant relationship with any of the TSCC-A sub-scales. In all cases, beta (β) values for the relationship between victimisation and outcome were reduced when PY and LT poly-victimisation were jointly added to each regression model, suggesting they account for some of the variance in all relationships.

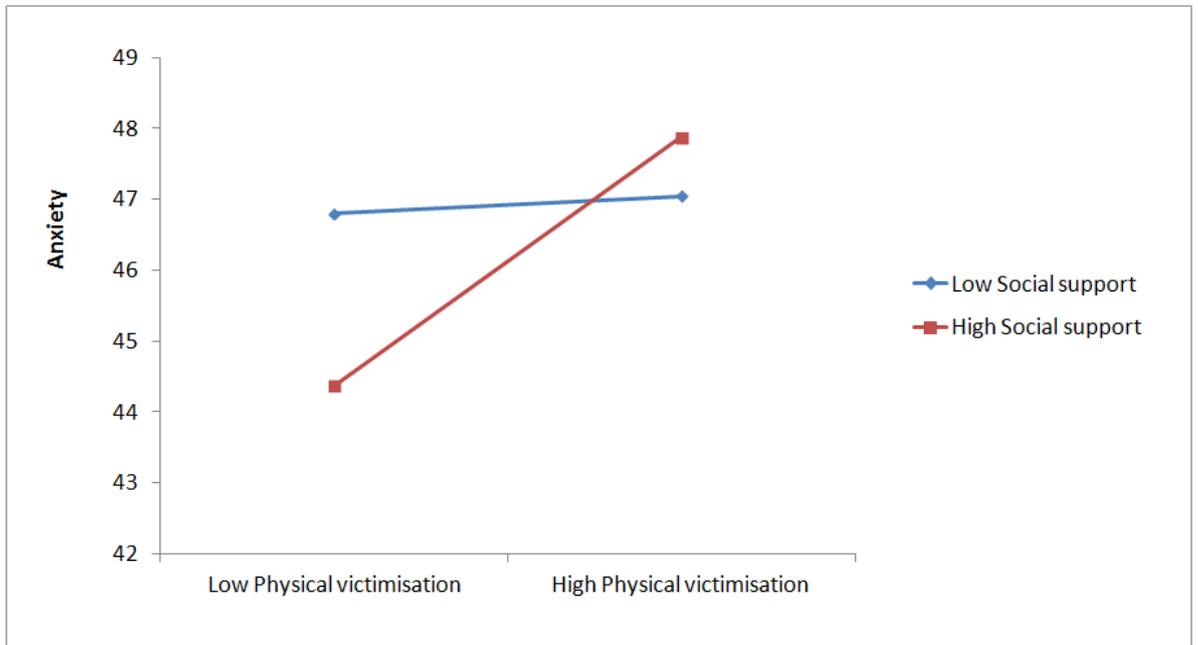
4.12.3. The impact of social support on the relationship between victimisation and psychological well-being.

Social support (SS) was tested as a moderator of the relationship between different categories of victimisation and TSCC-A outcomes. This was done by investigating whether there was a significant interaction between victimisation category and social support within the above analyses (see Table 31). SS was only found to be a significant moderator of the relationship between physical victimisation and anxiety.

The plot of the interaction effect (Figure 5) shows that the relationship between physical victimisation and anxiety is always positive regardless of the value of the moderator.

Figure 5

The interaction between anxiety and physical victimisation at different levels of the moderator (social support).



However, at high levels of social support, a lower amount of physical victimisation is associated with lower levels of anxiety than cases where there are low levels of social support. However, with higher amounts of physical victimisation, high levels of social support are associated with marginally higher levels of anxiety than cases with low levels of social support.

SS was a significant main predictor of depression but it was not a significant moderator of the relationship between physical victimisation or bullying and depression.

4.12.4. Impact of extrafamilial victimisation experienced in multiple locations.

As outlined in Table 32, linear regression analysis showed that being victimised in more than one location significantly predicted anxiety, depression, anger and PTS, as did logistic regression analysis (Table 33) when dissociation was explored as the outcome.

Table 32

Linear regression analysis exploring the ability of victimisation experienced in multiple locations to predict psychological well-being.

	β	t	R^2	F
Anxiety				
Victimised in multiple locations	0.07	6.27***	0.06	7.05***
Depression				
Victimised in multiple locations ^a	0.06	5.81***	0.09	8.96***
Anger				
Victimised in multiple locations	0.06	4.81***	0.04	4.52***
PTS				
Victimised in multiple locations	0.08	6.81***	0.09	9.18***

^aGender was controlled for in this model by entering it into the first block of the regression analysis

Note: Seven school dummy variables (not shown) were also entered into these models to control for school-level clustering within the data.

Four of these school dummy variables were significant predictors of depression and one was a significant predictor of PTS.

Table 33

Logistic regression analysis exploring the ability of victimisation experienced in multiple locations to predict dissociation.

Variable	Dissociation	No dissociation	OR	95% CI	P
	% (N)	% (N)			
Victimised in multiple locations	19.4 (51)	80.6 (212)	3.55	2.14-5.89	.000
<i>Victimised in one location</i>			1		

Cox & Snell R Square= 0.064

OR= odds ratio, CI= confidence interval

Note: Seven school dummy variables (not shown) were also entered into this model to control for school-level clustering within the data. Five of these school dummy variables were significant predictors of dissociation.

Chapter 5. Study 1: Discussion

Research exploring extrafamilial victimisation in the UK is less common than found in the USA. This means that there exists a gap in the knowledge for a comprehensive understanding of the extent, characteristics and impact of extrafamilial victimisation amongst young people in the UK. In recognition of the gaps in the current research literature, study one of this thesis addressed five main research questions which aimed to provide a comprehensive insight into the prevalence, characteristics, and psychological impact of extrafamilial victimisation. These issues have been explored within the theoretical context of the routine activities theory of extrafamilial victimisation (RAT) (Miethe & Meier, 1994) and the ecological systems theory of extrafamilial victimisation (Hong & Espelage, 2012; Salzinger, et al., 2002).

5.1. Prevalence.

Previous understanding of the prevalence of extrafamilial victimisation amongst young people in the UK has had to be based on amalgamated data collected from numerous sources. This is problematic as each of these sources relies upon different definitions of victimisation, different methodological techniques, and draws upon a different population of young people each time. By conducting a large, holistic, school-based survey with 730 English young people, the findings from the current study therefore aimed to address this limitation of the research literature. In doing so, a comprehensive assessment of 24 direct and indirect extrafamilial victimisation experiences were explored.

Findings supported hypothesis 1.1.a. in that extrafamilial victimisation was highly prevalent amongst this English sample of young people (aged 13-16). Only a small minority of the sample reported having never been victimised (15.9%) and, on average, young people were victimised 2.8 times over their lifetime. An adapted version of the JVQ was used to explore extrafamilial victimisation, adapted by closely following the changes made within the NSPCC's survey (Radford et al., 2013). This therefore facilitates a more reliable comparison of prevalence rates of victimisation between the Developmental Victimization Survey carried out in the USA (Finkelhor, Turner, Ormrod & Hamby, 2009), the NSPCC's study of child maltreatment in the UK (Radford et al., 2013), and the current study carried out within this thesis (all of which used a version of the JVQ to explore victimisation). However, the exclusion of intrafamilial victimisation in the current study and the way in which some of the victim categories were composed makes it difficult to draw exact comparisons between these three surveys. Nevertheless, similarities and differences across studies and countries in the prevalence of extrafamilial victimisation were found.

The overall prevalence of extrafamilial victimisation was very similar across all three studies, despite the inclusion of intrafamilial victimisation in the NSPCC (Radford et al., 2013) and USA (Finkelhor, Turner, Ormrod & Hamby, 2009). In the current study, 84.1% of young people experienced one or more types of LT extrafamilial victimisation, 83.7% in the NSPCC's study, and 87% in the USA survey. Within the sample used in the current study, indirect victimisation was the most prevalent aggregate victimisation category over the lifetime (LT) and past year (PY) followed by direct experiences of bullying. Comparing this to the findings from the NSPCC's national survey (Radford et al., 2013), prevalence rates of

indirect exposure to community violence over the LT and PY were slightly lower (61.4% and 31.2%, respectively) but close to those reported in the current study (70% and 49.9%, respectively). Peer victimisation was comprised of emotional abuse, physical violence and sexual victimisation by a peer in the NSPCC study and the prevalence rates were higher (59.5% and 35.3%, respectively) (Radford et al., 2013) than those found in the ‘bullying’ category in the current study (43% and 27%, respectively). This may reflect the inclusion of sexual victimisation in the Radford et al. (2013) study where this was omitted in the current study.

Contrasting the findings from Radford et al. (2013) and the current survey to those from the USA, physical assault appears to be the most prevalent category of PY and LT victimisation in the USA (56.7% over the LT and 46.3% in the PY) (Finkelhor, Turner, Ormrod & Hamby, 2009). These figures are higher than those reported in the current sample (27.5% and 16.1%, respectively) but the USA survey included assault by siblings, peers and others, as well as kidnap/attempted kidnap and dating violence within this category. Peer victimisation was followed closely by indirect victimisation (37.8% and 25.3%, respectively) and property victimisation (37.8% and 24.6%, respectively; Finkelhor, Turner, Ormrod & Hamby, 2009). The prevalence rate for indirect victimisation in the USA was therefore around half the prevalence rate found in the current study and the NSPCC’s research. The USA figures for indirect victimisation include a wider range of more extreme experiences, such as witnessed family violence, gun crime and environmental victimisation (e.g., war), yet there were less questions on more conventional types of witnessed victimisation (e.g., bullying). This may account for the lower prevalence rates reported in the USA-based studies compared to the two UK studies. However, the prevalence rates for property victimisation were higher than those found with the

current sample of young people (27.5% over the LT and 16.1% in the PY within the current sample)³⁰.

Looking at dating violence and sexual victimisation, differences across the prevalence rates reported here and in previous studies can be identified, both within and across countries. The figures on dating victimisation from the NSPCC survey include sexual victimisation, and the prevalence rates reported in this survey for the 11-17 year old sample (7.9% over the LT and 5% in the PY) were higher than those found in the current study when sexual victimisation by a boyfriend or girlfriend was included (5.3% over the LT). The findings from the survey in the USA are lower still (2.1% and 1.4%, respectively), yet this category included physical dating violence only (therefore excluding emotional dating violence and sexual dating violence) which is likely to contribute to this finding. The older age range of the survey carried out by the NSPCC (11-17 years) may contribute to these higher findings compared to the age range within the current survey (13-15 years). This is because older young people are more likely to be dating and therefore exposed to dating violence compared to younger people.

Figures on the prevalence of sexual victimisation reported by the NSPCC for the 11-17 year old sample (16.5% over the LT and 9.4% in the PY) were very similar to those in the current study (14.6% and 11.2%, respectively), despite the fact that the NSPCC explored sexual victimisation by any perpetrator, including family members, and used an older sample of young people. Both sets of findings are higher than the USA figures (Finkelhor, Turner, Ormrod & Hamby, 2009),

³⁰ The same categorisation of property victimisation in the USA was used in the current study, although the USA study did not explicitly exclude family members as perpetrators

which also included family members as perpetrators and reported prevalence rates of 9.8% over the LT and 6.1% in the PY.

In summary, the above findings suggest that young people in the UK experience higher rates of indirect victimisation, peer victimisation, dating violence and sexual victimisation than young people in the USA. In contrast, figures on property victimisation and physical victimisation suggest these issues may be more prevalent within the USA compared to the UK. Despite the use of the same measure of victimisation (JVQ), however, interpretation of these findings is difficult due to slight differences in the ways in which victimisation was categorised within these studies, along with the inclusion or exclusion of intrafamilial victimisation. Additionally, testing of the JVQ adapted for this thesis revealed significant, yet weak to moderate correlations when exploring construct validity, as well as questionable to low internal reliability for the overall victimisation score ($\alpha = .66$) and each victimisation module and category ($\alpha = .24-.57$). These findings are slightly lower than those reported in the testing of the original JVQ by Finkelhor, Hamby et al. (2005) as discussed in chapter 3, section 3.5.2.2.1. The data collected for this study may therefore be less reliable than that collected within the USA and this may have influenced the victimisation prevalence rates identified.

The USA and NSPCC surveys also used representative national samples compared to the current sample which was clustered within schools, and therefore the findings within the current study may be more heavily influenced by sample characteristics. There were also higher prevalence figures within the current study taking into account the exclusion of extrafamilial victimisation which would have been expected to lower prevalence rates. This may relate to the procedure used (self-complete survey within a school setting compared to interviews or computer-

assisted interviews in the young person's home) which may have fostered a greater sense of anonymity and thus increased disclosure.

Exploring the impact of gender on the prevalence of extrafamilial victimisation, the overall patterns of victimisation, whilst not significant at $p < 0.01$, do suggest gender differences in overall victimisation rates in line with hypothesis 1.1b and previous findings in the UK and USA (e.g., Radford et al., 2013, and Finkelhor et al., 2009). However, statistical analysis only revealed a significant difference in the prevalence of conventional crime (LT and PY) and robbery (LT only), which were both higher amongst young males, and internet sexual victimisation (PY and LT) which was higher amongst young females than males. The reason other categories and types of victimisation were not found to be significantly different is likely to be related to a lack of power within this study, with a sample size large enough to detect large effects only. Further research with larger power is therefore needed to explore gender differences in the extrafamilial victimisation of young people within the UK.

The second aim of the current study was to address an important gap in the research literature by exploring the characteristics of the perpetrators of extrafamilial victimisation towards young people in the UK. There was little research on which to base a hypothesis in this area, but it was anticipated that most perpetrators would be the same age or older than the victim (hypothesis 1.2.a.). Categories of victimisation which we most commonly associate as being perpetrated by a person of the opposite gender to the victim (e.g., dating violence or sexual victimisation) or the same gender as the victim (e.g., bullying, physical violence) were hypothesised to exist in the current data. On the whole, the findings suggested that the perpetrator is generally one person who is known to, and who tends to be the same age or older

than, the victim, thus supporting this hypothesis. However, findings were dependent on the type of victimisation being explored.

It must be noted that the above figures relate to the *last time* the young person experienced each type of victimisation due to the way in which follow-up questions were asked. This is not, therefore, a comprehensive assessment of the perpetrator characteristics of all of the times the young people had been victimised, as discussed in section 5.10. Nevertheless, the findings are important as they help to highlight areas for the prevention of extrafamilial victimisation. In particular, it would appear that interventions to improve the relationships between young people and their peers, as well as educating young people on the impact of hurtful and harmful behaviour towards others, may be useful. This would provide a collaborative approach to address victimisation from the perspective of the perpetrator and the victim. It is also important to take into account the type of victimisation under investigation as perpetrator characteristics may differ and require varied interventions. Further research should be carried out in this area to explore perpetrator characteristics amongst other samples of young people and develop our understanding to learn how best to respond to this issue.

5.2. Multiple victimisation.

Previous findings have shown that it is rare for young people to be victimised just once (e.g., Finkelhor et al., 2009b) and the outcomes from the current study support this. The average number of different LT victimisation types experienced by the current sample was 2.8, ranging from 0-15 different experiences. This supports the hypothesis that the majority of young people would have been victimised more than once (2.1.a). This figure is fewer than LT rates in the literature

from the USA where an average of 3.7 victim experiences were reported, ranging from 0-26 different types (Finkelhor et al., 2009b). However, more types of victimisation were assessed by Finkelhor et al.'s research so this could be expected.

Together, these research findings suggest that victimisation is not an isolated event. The exploration of a young person's victim experiences, be it in a practical or research-based setting, should therefore consider the possibility that the young person has experienced multiple types of victimisation. A limitation of this finding, however, is that participants were not asked whether the experiences they disclosed within the JVQ were linked to other disclosed victim experiences. Consequently, some of the experiences reported by a young person may have been linked to the same event (e.g., a robbery which occurred at the same time as, and by the same perpetrators of, a physical assault). As a result, it is possible that the overall extent of victimisation reported within the current study may be exaggerated when screener questions are totalled to give young people an overall victimisation score (Finkelhor, Hamby, et al., 2005). Nevertheless, the questionnaire is able to provide an account of the different *types* of victimisation experienced by participants.

5.3. Poly-victimisation.

The second aim of this study was to explore the prevalence and characteristics of LT and PY poly-victims in a sample of young people from the UK. As hypothesised (2.1.a), the current findings support the research showing that a small percentage of young people experience a high amount of different victim experiences and can therefore be classified as poly-victims. Using the same classification criteria, prevalence rates of poly-victims in this sample were 14% over the LT and 23.4% in the PY, which are close to the LT poly-victimisation figures

from the USA (10.2% - 10.3% LT poly-victimisation in the sample of 11-18 year olds; Finkelhor et al., 2009b), and very similar to the PY figures (22% across all ages; Finkelhor et al., 2007a). This is despite the exclusion of child maltreatment in the current research when it was included in the others (as above, these higher prevalence rates may be related to the way in which the young people completed the survey). This suggests that around a tenth of the young people in England and the USA may experience an extreme amount of extrafamilial victimisation over their LT (poly-victimisation), rising to around one quarter in the PY. Figures on the prevalence rates of poly-victims have not yet been reported by Radford et al. (2013).

Further research is needed to explore the development of poly-victimisation in more detail and to understand why some young people continue to experience high levels of extrafamilial victimisation where others desist. Poly-victims in the current sample were found to have experienced the most 'serious' types of victimisation compared to non-poly-victims, providing partial support for hypothesis 2.2.b. A direction for future research would therefore be to prospectively explore whether poly-victims experience increasingly serious types of victimisation over time, or whether poly-victims start off experiencing the most serious forms of victimisation which increases their vulnerability to further victimisation. In doing so, more could be understood about the developmental pathways towards poly-victimisation to be used in intervention.

Exploring the characteristics of the two victim groups (poly-victims versus non-poly-victims), the current research added to the limited findings in this area. However, no significant differences were found between the two groups in regards to their demographic characteristics (gender, age, ethnicity, disability, and family composition). This is similar to the findings reported by Finkelhor et al. (2009b) for

the 11-17 year age group as the only significant difference found in their study was that LT poly-victims were less likely to live in intact, two parent family households than LT non-poly-victims. The findings for PY poly-victimisation between the two studies differed, however, in that Finkelhor et al. (2007a) reported a number of significant demographic differences between PY poly-victims and non-poly-victims (PY poly-victims were significantly more likely to be males and older than PY non-poly victims, and high poly-victims were more likely to be black, have low socio-economic status and reside in one-parent households) whilst the current study reported none. Research findings from the current study also differed to those reported with the 11-17 year old sample of young people in the NSPCC study (Radford et al., 2013), whereby PY poly-victims had a higher rate of child and parent disability, were more likely to be older, and had a higher rate of non-victimisation adversity. However, gender and socio-economic status were not significantly different between the two groups.

Within the current study, the hypothesis (2.2.a.) that PY or LT poly-victims would be less likely to come from intact, two-parent households than lower-level PY or LT poly-victims was therefore refuted. Whilst the findings for LT poly-victims are closely aligned to the findings reported by Finkelhor et al. (2009b), they differ slightly and further exploration of LT poly-victims is therefore needed. When exploring PY poly-victimisation, all three studies relied on the same classification criteria, thus minimising bias in the way poly-victimisation was determined, yet their findings regarding the characteristics of PY poly-victims differed. The differences found within each study could therefore be sample-specific and dependent on the way in which the predictive variables (demographic characteristics) were measured and explored (i.e., sample and measurement bias). A

limited number of demographic variables were explored in the current study and this may have therefore limited the possibility of finding a significant difference. It may also relate to the fact that intrafamilial victimisation was excluded in the current study and included in the NSPCC and USA surveys. As such, it may be the contribution of intrafamilial victimisation which leads to the differences between lower-level and PY and LT poly-victims within the previous studies and this should be explored further within future research. However, the differences across all three studies also suggest that the characteristics of PY poly-victims may not be easy to define, and that these young people may not represent such a distinct population of young victims. If correct, this would have implications on the effectiveness of preventative efforts to identify poly-victims and prevent young victims from going on to experience extreme levels of extrafamilial victimisation. It is therefore important that future research is carried out to explore this issue.

5.4. Location of extrafamilial victimisation.

The location of extrafamilial victimisation has been largely neglected in the research literature and therefore little is known about the places in which young people are victimised and the risk factors relating to these locations. This was explored in the current study and the findings revealed how the majority of the extrafamilial victimisation experienced by this sample of English young people occurred within the community environment. The main exception to this was peer victimisation which was most commonly experienced inside the school. This refutes hypothesis 3.1.a. that victimisation overall would occur at similar levels in the school and community. At face value, the findings also differ to preliminary findings from the USA, Australia, and the UK, whereby extrafamilial victimisation was most,

or at least half, of the time said to have occurred within or around the school grounds (Chaplin et al., 2011; Delfabbro et al., 2006; Young et al., 2009). This likely relates to the difference in the way victimisation was measured and defined across these studies, however, in that they focussed on violent assault and theft, bullying, and sexual victimisation, respectively. Looking only at these types of victimisation within the current study, the findings closely resemble those found by Chaplin et al. (2011) and Delfabbro et al. (2006). However, they markedly differ to those found by Young et al. (2009) in the overall prevalence and location of sexual victimisation and this is likely to relate to the greater number of questions used to explore sexual victimisation within their study compared to the two questions used within the current study. These findings therefore support hypothesis 3.1.b and the findings of Turner et al. (2011) who reported differences in the location of extrafamilial victimisation according to the type of victimisation being explored.

For both school-based and community-based victimisation, physical, interpersonal forms of victimisation most commonly occurred in outside, open locations (e.g., on the school-field or on the street) within the current study (supporting hypotheses 3.2.a and 3.2.b). More discrete forms of victimisation, such as theft of property, more often occurred in an indoor location (e.g., a classroom or a friend's house), supporting hypothesis 3.2.c. The exception to this was contact sexual assault which most commonly occurred indoors in school and community-based settings, although it must be noted that there was only one reported incident of contact sexual assault occurring at school.

Indoor locations most often have increased levels of guardianship which may be an influential factor in relation to young people experiencing less overt, direct forms of victimisation in these settings. The finding that they experience more

discrete forms of victimisation in indoor locations, such as theft of personal property, may highlight the fact that these types of victimisation would less easily be detected by an observer/guardian. Alternatively, guardianship in outdoor, open areas is likely to be lower and thus allows for greater opportunities for more direct forms of victimisation such as bullying and physical assault. This is less likely to be detected by a guardian and the perpetrator may therefore feel more comfortable in their act. These results provide a level of support for the RAT in that guardianship/supervision appears to be an influential factor in the victimisation of young people within school and community environments. They also support the notion within the literature review that location is linked to the severity of victimisation. This has implications for preventative efforts in that the level of supervision and guardianship over young people should be carefully planned and considered in places where young people come together. This has the potential to help prevent victimisation and reduce the severity of victimisation experienced. Future research should therefore look closer at the specific locations in which young people are victimised to help inform policing and supervision efforts on a local level.

Based on the information given by young people regarding the last time they experienced each type of victimisation, further analysis revealed how most young people were victimised in just one location (e.g., school or community). This is similar to findings reported by Turner et al. (2011) in the USA. However, a substantial percentage of young people in the current sample (44%) were victimised within the school *and* the community which was higher than the 20% reported in the USA (Turner et al. 2011). Based on these findings, it is important to further explore whether certain types of young people are more likely to be victimised in more than

one location than others, along with the impact this may have on the victim. In doing so, preventative efforts aimed at preventing victimisation within the school and community may be better directed.

It is important to note that the information on location given by young people within this study relates to the last time each type of victimisation happened to them (in line with the design of the JVQ; see a further discussion of this in section 5.10.), increasing the likelihood that locations relate to more recent victim experiences. Age is therefore likely to have played a confounding role in the findings on the location of victimisation within the current sample of young people. As young people get older, they tend to be given more freedom within the community which may mean they have a greater opportunity for community-based victimisation. This may therefore explain why there was a greater than hypothesised prevalence of overall community-based victimisation. Given that the research by Turner et al. (2011) adopted the same approach to exploring the location of victimisation, this may also explain why a greater number of young people within the current sample experienced victimisation in both the community and school environments. This is on the basis that the USA sample included younger people than the current study who are less likely to spend unsupervised time within the community.

5.5. Geographical location of extrafamilial victimisation

The geographical location of victimisation has been largely neglected in the victimisation literature. Japanese research has revealed that victimisation hotspots can be identified by looking at the distribution of extrafamilial victimisation in the community (Lee et al., 2012). This research suggests that victimisation hotspots are more prevalent in close proximity to the school and in areas where people are more

likely to congregate. The current study therefore used a visual mapping exercise to explore the geographical distribution of past-year victimisation around the school and surrounding community. This was presented as a unique case study of victimisation hotspots within one English town, in which all three secondary schools took part in the research. This is the first of such research to be carried out in the UK and therefore addresses an important gap in the empirical literature.

The findings showed an overlap in victimisation locations which created two ‘victimisation hotspots’ within the town, both of which encompassed the three secondary schools involved. The first encompassed the two larger secondary schools, while the second encompassed the smaller boys’ grammar school which was located closest to the town centre. This supports the hypothesis 4.1.a that identifiable victimisation hotspots would be found.

Secondly, it was hypothesised (4.2.a) that greater amounts of victimisation would be located within close proximity to the school the young person attended. Additionally, differences in the location of victimisation were anticipated for the young people attending each school. Support was provided for this hypothesis in that young people tended to experience a greater amount of victimisation in proximity to their own school than another school, although this was less pronounced for young people attending the co-educational school. This was particularly noticeable for young people attending the boy’s school, whereby pupils’ victimisation was particularly localised around their school. This supports the findings from the research by Lee et al. (2012) whereby 94.5% of criminal victimisation occurred within 500m of the school building. In contrast, the pupils attending the coeducational school had a larger spread of victimisation across the map which was less localised to the school they attended. It was noted that the boy’s

grammar school was closer to the town centre than the girl's grammar school and coeducational school. This may therefore account for some of the movement of pupils from the girls' grammar school and coeducational school to this location. However, this doesn't account for the wider spread of victimisation on the map for young people attending the coeducational school.

The maps used in this research were designed to explore the locations of past year victimisation experienced within the community, focussing mainly on the journeys of the young people who walked or cycled into school. The maps therefore covered a 1.5 mile radius around the school and, as a result, will not have included the neighbourhoods of those young people who lived further away (as suggested by the findings from the first pilot study, see Chapter 3). Further analysis was therefore carried out to look at the young people's journeys to and from school. This showed that those attending the coeducational school were more likely to walk to school than those attending the grammar schools. From this, it can be hypothesised that young people attending the coeducational school are likely to live closer to the school and therefore their homes and neighbourhoods are more likely to be represented on the map. Consequently, the likelihood of their victim experiences being represented on the map increases as the maps will also include the locations in which the young people spend the majority of their time (i.e., their home, neighbourhood, and school).

Further exploration revealed that the level of victimisation experienced by young people on the journey to and from school did not significantly differ according to the school the young person attended. This suggests that the way in which these young people travelled to school did not impact on their risk of victimisation on these journeys and therefore the distribution of victimisation on the

map. The geographical displacement of victimisation seen is therefore likely to relate to the residences of the young people surveyed, supporting the above point. It may therefore be useful for future research to explore the geographical distribution of extrafamilial victimisation according to specific neighbourhoods, as well as focusing on the area immediately surrounding the school. Whilst this would be more time consuming, it would provide a more detailed overview of all of the locations in which young people are victimised within the community, including their neighbourhoods.

The findings of this case study suggest that more attention should be given to the geographical spread of victimisation around schools and in the community, in order to identify victimisation hotspots. This type of analysis has practical advantages in that the research findings can be reported to the local police force and participating schools to improve their knowledge of victimisation in the immediate geographical community. Targeted policing and supervision can then be arranged in known victimisation hotspots which may lead to reductions in victimisation rates, as suggested by Bowers et al., 2011. Indeed, the findings from this study were reported back to the police force within this town and each of the three schools. This allowed for improved supervision/guardianship of the identified hotspots around the timings of the school day (Warwickshire Police Safer Schools Programme, Personal Communication, 2012). Overall, further research should be carried out in this area to explore the hotspots of extrafamilial victimisation experienced by young people and the types of locations in which victimisation tends to cluster. On the basis of this further research, analysis of any interventions put in place to ‘police’ these hotspots should also be conducted to explore the applied utility of such findings in the protection of children and young people.

In terms of the generaliseability of these findings, they relate specifically to one town and would need to be replicated elsewhere to verify the pattern of victimisation found. Nevertheless, this afforded some level of control over geographical influences which may impact on similar comparisons between young people attending schools in different towns (e.g., surrounding areas in the town and the industrial/ commercial/ leisure facilities available). By asking young people to draw their victim experiences, it allowed them to become more engaged in the task. However, doing so meant they had to have a good understanding of the areas surrounding the school in which to draw their victimisation, exposing the findings to possible error. Additionally, the findings may be influenced, in part, by confounding factors relating to the characteristics of the young people attending each of the three schools, all of which varied in their gender composition and other possible demographic factors. This should be controlled for where possible when conducting further research in this area.

5.6. Victimisation on the journey home from school

According to the principles of the RAT of extrafamilial victimisation, the young person's routine activities associated with the school day, specifically their journey to and from school, have the potential to increase or decrease their risk of extrafamilial victimisation. However, there has been very little research carried out in this area. Objective 3.3 of this research was therefore to explore the prevalence of extrafamilial victimisation on the journey to and from school, and then to explore whether the characteristics of this journey increased the likelihood of victimisation (objective 6.1.). Based on the limited UK-based research (e.g., Wolke et al., 2001;

MORI, 2004), it was hypothesised (3.3.a) that a small amount of victimisation would occur on the journey to and from school.

A minority of young people in the current sample reported victimisation on the journey to and from school (8.8%); 1.4% of whom were victimised on the way to school and 7.8% on the way home. This suggests that extrafamilial victimisation is not commonly perpetrated on the journey to or from school and is in line with the findings from other UK-based research studies (MORI, 2004; Wolke et al., 2001). As such, these prevalence rates are lower than those reported for victimisation on the journey to and from school in the USA by Garofalo et al. (1987) and Raskauskas (2010) whereby almost one fifth of the young people in these surveys reported journey-based victimisation. However, the prevalence of victimisation on the journey to and from school varied in the current study according to the type of victimisation explored. This may relate to the most likely perpetrators of each type of victimisation and the likely absence of guardian protection and supervision at this time which may encourage different forms of victimisation.

The journey home from school was where over one third (36.6%) of the bullying experiences reported by the sample occurred. As peer victimisation also commonly occurred within the school (51.4%), this may highlight one area in which victimisation in the school environment and on the journey to and from school overlap. As such, the need for a joined up approach to the prevention of victimisation within the school and the community, in relation to routine activities associated with the school day, is emphasised. However, this needs to be explored more in future research to understand why and when victimisation experienced during the school day overlaps with victimisation experienced on the journey to and from school (and vice versa). This is likely to be affected by the type of

victimisation experienced, the dynamics of victimisation, and community/neighbourhood factors relating to the victim and the perpetrator(s).

Whilst victimisation on the journey to and from school has been found to be fairly prevalent in other international studies, the characteristics of the journeys made and the activities associated with them have yet to be found to be significant risk factors for victimisation (Lee, et al., 2012; Raskauskas, 2005). It was not possible to look at victimisation on the way to school as prevalence rates were too low within the current research. Therefore, the characteristics of the journey home from school and victimisation on this journey were explored. Based on the empirical research literature carried out so far, it was hypothesised (6.1.a) that the characteristics of the journeys made would have little impact on victimisation on this journey.

Overall, this analysis supported the previous literature in this area (e.g., Lee, et al., 2012; Raskauskas, 2005), suggesting that the characteristics of the young person's journey home from school (mode of transport used, and , for young people who walked or cycled home, the amount of stops made on the journey and whether the journey was travelled alone or with friends) do not have an impact on the likelihood of victimisation on this journey. In doing so, these findings refute elements of the RAT in that a greater time spent in the community travelling home from school, along with a lack of guardianship/peer support from friends whilst on this journey should increase the likelihood of victimisation. However, detailed exploration of the characteristics of the journeys home from school was carried out only for those who walked or cycled. This therefore limits the findings and fails to explore the characteristics of journeys travelled on the school bus and their role in journey-based victimisation. Additional research should therefore focus on other

aspects of the journey home from school, including the journeys for those who travel by bus. Indeed, Raskauskas (2005) found some characteristics of the journeys of young people who travel on the school bus influenced their victimisation on these journeys.

The limited prevalence of victimisation on the journey home from school, and the exploration of the characteristics of the journey home only for those who walk or cycled, meant that the power to detect significant differences was limited. This may have led to the non-significant findings regarding the characteristics of the journey home which may have been significant within a larger sample. Additionally, young people were classified as walking/cycling home from school if this box was ticked on the questionnaire, even if other boxes (such as getting the school bus) were also ticked. As such, it may be that many of these young people cycled or walked home very infrequently and most often travelled via a different means of transport. This lack of clarity in the data may mean that the findings are confounded by variety in how often young people use different modes of transport to travel home from school, and this should be controlled for more clearly in future research.

5.7. The influence of school-related routine activities and extrafamilial victimisation.

RAT suggests that the young person's characteristics, activities in the community, and level of guardianship all interact to increase or reduce their exposure to victimisation (Miethe & Meier, 1994). To explore the influence of routine activities and guardianship in relation to the school day in more detail, the role of the young person's participation in after-school activities and whether their parents are home when they arrive home from school (guardianship) were

investigated within the current study. Based on the previous literature in the area, it was hypothesised (5.1.a) that guardianship and participation in after school activities immediately after school would reduce the likelihood of community-based victimisation. This hypothesis was not supported however, as neither of these characteristics predicted community-based victimisation.

These findings therefore refute the hypothesis and contrast with other research which has found that after-school activities offer protection against extrafamilial victimisation for some young people (e.g., Peguero, 2009). They also contrast with the RAT which suggests that young people who have a lower level of parental supervision and who spend more time engaging in unstructured activities are more at risk of community-based victimisation. It must be noted, however, that the type of after-school activity young people engaged in was not explored in this research and this should therefore be investigated further research. This is important as other research in this area has found it to influence the impact after-school activities have on the likelihood of victimisation (Peguero, 2009).

Alternatively, it may be that the activities carried out immediately after school are less important for community based victimisation than activities carried out in the evening and on a weekend (as explored in the next section). Indeed, activities such as drinking alcohol and engaging in delinquent behaviour, which have been found to impact on community-based extrafamilial victimisation (Felson et al., 2013, Smith & Ecob, 2007), may be less likely to occur in the hours immediately after school and it may be these factors which account for most of the risk in the community. Additionally, previous findings within this thesis suggest that the majority of young people (66%) who walk or cycle home from school do not make any stops on this journey home and it may therefore be that young people go

straight home after school and are not putting themselves at risk within the community by participating in unstructured, unsupervised activities. It would have been desirable to narrow down the time frame for community-based victimisation to the journey home from school within this analysis, as after-school activities are more likely to have an impact on victimisation within this specific timeframe. However, this was not possible due to the small amount of victimisation on the journey home from school within this sample. All of these above factors may therefore have impacted on the findings within the current study and should be explored in further research.

9.8. The influence of routine activities in the community and community-based extrafamilial victimisation.

The seventh aim of this research was to explore the role of routine activities, parental guardianship, and the characteristics of young people and their behaviour on the extent of their victimisation in the community in more detail. Based on previous research, it was hypothesised that young people who were in trouble with the police and who associated with delinquent friends (hypothesis 7.1.a), young people who spent more time with their friends on evenings and weekends, spent more time doing unstructured, unsupervised activities, and drank alcohol with friends (hypothesis 7.1.b), and young people with lower levels of parental supervision regarding their whereabouts within the community (hypothesis 7.1.c), would have a higher prevalence of community-based extrafamilial victimisation.

Associating with delinquent peers and being in trouble with the police significantly predicted higher rates of community based extrafamilial victimisation. Additionally, drinking alcohol with friends significantly predicted greater

community-based victimisation, as did lower levels of parental guardianship relating to evening activities with friends. These findings therefore fully support hypotheses 7.1.1 and 7.1.c, and partially support hypothesis 7.1.b. Overall, they suggest that activities which make young people more likely to come into contact with potential offenders and which influence their behaviour in a way which may be risky and increase their 'target attractiveness' (e.g., drinking alcohol, engaging in anti-social behaviour), coupled with lower parental guardianship, appear to increase the young person's exposure to community-based extrafamilial victimisation. This adds to the supporting empirical research literature for the RAT of extrafamilial victimisation (e.g., Finkelhor, 2008; Lauritsen, 2003; Schreck & Fisher, 2004).

Further research should explore these findings in more detail; what makes parents less interested in the whereabouts of their children? What is the relationship between a young person's and their peers' offending behaviour? Why does alcohol increase risk of extrafamilial victimisation? Previous research in this area suggests that family bonds and attachment may influence parental protection (Schreck & Fisher, 2004), whilst peer delinquency, offending and risky behaviour exposes the young person to more opportunities of victimisation (Schreck & Fisher, 2004) and provides young people with less police protection (Finkelhor, 2008). A better understanding of these issues will therefore help to develop better interventions to target and address these risk factors and reduce victimisation.

In spite of these significant research findings, additional exploration of social factors which, based on RAT, were hypothesised to be influential on outcome (hypothesis 7.1.b; the amount of time the young person spent with friends (on an evening and weekend) and the places young people go with friends), did not predict community-based extrafamilial victimisation. This provides some evidence against

RAT as one would expect that young people who spend more time outside of the home with friends, engaging in unstructured, unsupervised activities, would be more likely to experience community-based victimisation than young people who do not. Indeed, a greater amount of time spent away from home was found to be a significant risk factor in the research by Felson et al. (2013), Lauritsen (2003), and Schreck and Fisher (2004). It may be that the young people in the previous empirical studies were engaging in riskier behaviour whilst away from the home than the young people in the current sample. Additionally, differences in the samples used within these research studies may have influenced the outcomes. Further research is therefore needed to explore these issues in greater detail.

It is important to note that the final regression model only accounted for 14% of the variance in aggregate levels of community-based victimisation. This is despite the inclusion of three significant predictors of community-based victimisation. As such, these findings suggest there are other factors which have not been included in this analysis which are responsible for 86% of the variance and are therefore likely to be stronger predictors of outcome. Given that previous research has found young people with lower parental bonds, for example, to be more likely to spend time away from the home (Schreck & Fisher, 2004), factors such as this are likely to interact with the predictors included in this analysis and should therefore be entered in future analyses of this outcome. Additional predictors of community-based extrafamilial victimisation therefore need to be explored in future research to gain a better understanding of the most effective factors to target through intervention. Additionally, the 'guardianship' scale devised for this research was found to have poor internal reliability ($\alpha = .56$). Although this concept was found to be significantly related to extrafamilial victimisation, low internal reliability of the

measure may have influenced the power and reliability of the associated analyses and findings. However, no predesigned, standardised questionnaire exploring guardianship could be identified.

5.9. Impact of extrafamilial victimisation on psychological well-being

The analysis carried out for the final aim of the research provided a detailed exploration of the impact of extrafamilial victimisation on the psychological well-being of young people. This was explored within an ecological framework whereby victimisation within different exosystems (e.g., location of victimisation) and factors within the young person's microsystem (e.g., social support) were explored in relation to the young person's trauma symptoms. In doing so, the research investigated areas which have so far been under-researched.

5.9.1. Impact of different categories of victimisation.

Partially supporting the first hypothesis (8.1.a) physical victimisation, bullying, sexual, and indirect victimisation were all found to be significant predictors of at least one area of psychological well-being (depression, anger, anxiety, PTS, or dissociation; as measured on the sub-scales of the TSCC-A). Bullying, physical and sexual victimisation appeared to have an impact on many areas of psychological well-being, whilst property victimisation and dating violence did not predict any outcome and indirect victimisation only predicted one. This provides an element of support to the hypothesis that the 'most serious' categories of victimisation have more of an impact on psychological well-being than 'less serious' categories. This is in line with previous research in this area, such as the research conducted by Howard et al. (2002), which found that direct violent victimisation had

more of an impact on psychological distress than witnessing violence. As such, the type/category of victimisation the young person has been exposed to needs to be understood when attempting to address its impact and identify the most effective response. Additionally, the measurement of psychological well-being was based on a well-established, reliable and valid measure (TSCC-A, Briere, 1986), increasing confidence in the findings.

However, it is surprising that dating violence did not predict any of the outcomes as this is a serious form of victimisation. This is likely to be related to the fact that dating violence was the least prevalent category of extrafamilial victimisation within this sample of young people (14 young people experienced it over the PY and 47 over their LT). Therefore the power to detect a significant effect was very small, particularly when added to a regression model with a large number of predictors, such as this. This should therefore be tested in future research with a larger sample of young people to explore whether it remains a non-significant predictor of psychological well-being.

5.9.2. Impact of poly-victimisation.

Poly-victimisation has been suggested within the current literature to be accountable for a very large proportion of the relationship between individual victimisation categories and outcome (e.g., Finkelhor et al., 2005a). It was therefore hypothesised (8.2.a) within the current research that PY and LT poly-victimisation would significantly predict psychological well-being. Additionally, a large proportion of the relationship between the different categories of extrafamilial victimisation and psychological well-being was hypothesised to be accounted for by PY and LT poly-victimisation. Research findings partially supported this hypothesis. PY poly-victimisation was found to predict three of the five areas of psychological

well-being and accounted for all or some of the variance between each category of victimisation and outcome. This suggests that PY poly-victimisation has a significant influence on the relationship between extrafamilial victimisation and psychological well-being, depending on the type of victimisation explored. Specifically, PY poly-victimisation accounted for all of the relationship between sexual victimisation and outcome, physical victimisation and bullying and dissociation, and indirect victimisation and anger. As such, the young person's recent experiences of other types and categories of victimisation need to be accounted for when attempting to explore or explain the impact of extrafamilial victimisation on the young person's psychological well-being.

In spite of this, LT poly-victimisation was not found to be a significant predictor of any area of psychological well-being. This was against the hypothesised findings and those reported in previous research in this area; both Finkelhor et al. (2009b) and Radford et al. (2013) noted a significant relationship between LT poly-victimisation and psychological well-being. One reason for this may relate to the higher number of different types of victimisation experienced by LT poly-victims in previous research compared to the current research. For example, the LY poly-victims identified by Finkelhor et al. (2009b) had experienced nine or more types of victimisation compared to six or more in the current study. As their study reported a significant correlation between aggregate victim experiences and psychological well-being, it may be that the LT poly-victims within the current sample had not experienced 'enough' victimisation for LT poly-victimisation to significantly contribute to psychological well-being or over-ride the impact of individual categories of victimisation. Additionally, the difference in findings may relate to the exclusion of intrafamilial victimisation within the current research. As such, it may

be that intrafamilial victimisation is an important element of LT and PY poly-victimisation and the impact this can have on the young person. This should therefore be explored more thoroughly in future research as it would be an important element for consideration in the design and implementation of interventions.

5.9.3. Social support as a moderator of the relationship between extrafamilial victimisation and psychological well-being.

It was hypothesised (8.3.a) that young people with higher levels of social support (SS) would experience lower levels of trauma symptoms following exposure to extrafamilial victimisation. As such, SS was predicted to be a moderator of the relationship between extrafamilial victimisation and psychological well-being and explored within the current research. The findings largely refuted the hypothesis, in that SS was only found to be a moderator of the relationship between physical victimisation and anxiety; no other interaction terms were significant. This relationship was explored further and it was found that young people with high levels of social support had lower levels of anxiety with low levels of physical victimisation, but higher levels of anxiety than young people with low levels of social support when physical victimisation was high.

Whilst this finding may, on face value, appear to be surprising, a number of explanations can be hypothesised. Within the regression model, social support was a significant negative predictor of anxiety, suggesting that lower levels of social support predict a higher level of anxiety. This may therefore explain why, according to Figure 5, young people lower in SS were already high in anxiety and therefore faced only a marginal increase in anxiety with high levels of physical victimisation. Those young people who had high levels of SS had lower levels of anxiety with low levels of physical victimisation, but when faced with high levels of physical

victimisation their anxiety markedly increased. It could be possible that more supportive friends are likely to retaliate in support of the victim following a number of physical attacks. Doing so may lead to further victimisation through retaliation, thus increasing the victim's anxiety regarding their friends' reactions and of further victimisation. Alternatively, it may be that young people have supportive friends who they can rely on emotionally, but when they become victims of physical victimisation, for example, their friends are not supportive and do not help the young person or prevent this from happening. As such, this may increase the young person's anxiety after experiencing a high level of physical victimisation as they may come to believe that even the closest people around them cannot help them or prevent them from being victimised. As such, the definition of SS and its characteristics are important. However, the current SS measure did not explore this element of SS and further exploration of this area is therefore needed.

The average SS score was 5.87 (out of a maximum 7) with a standard deviation of 1.15, which means that most young people within this sample reported a fairly high level of SS with limited variability in scores. This may therefore have reduced the ability of the statistical analysis to differentiate the outcome of victimisation based on varying levels of SS (and, as such, the findings regarding SS as a moderator of this relationship). Additionally, the 'social support' scale devised for this research was based on three specifically designed questions aimed at providing a brief, overall assessment. This was important given the amount of research materials administered to participants throughout this study. However, the questions used were found to have poor internal reliability ($\alpha = .50$) and this may have influenced the power and reliability of these analyses and findings. This may also be the reason that SS did not moderate any of the other relationships between

victimisation and psychological well-being. Future research may therefore wish to explore this issue further using longer, previously established and validated measures of social support, such as the social support questionnaire (SSQ) (Sarason, Levine, Basham, & Sarason, 1983). Questions regarding the support of friends in association within victimisation should also be explored.

5.9.4. The impact of extrafamilial victimisation experienced in multiple locations.

Previous research has suggested that victimisation experienced in multiple locations (e.g., the school environment *and* the community environment) may have a greater impact than victimisation experienced in just one location (Turner et al., 2011). This was investigated in the current research and the findings supported hypothesis 8.4.a; extrafamilial victimisation experienced in the school *and* community environments predicted higher levels of anger, depression, anxiety and PTS, and increased the likelihood of dissociation compared to young people who were victimised in just one of these locations. These findings are similar to those reported by Raskauskas (2010) when looking at the cumulative effect of bullying and cyberbullying. This suggests that victimisation in more than one area of the young person's exosystem, and therefore the inability of the young person to escape victimisation in both the school and the community, has a greater impact on their psychological well-being. Should intrafamilial victimisation have also been explored in the current study, the additional experience of victimisation within the home environment from family members would likely have exacerbated the young person's trauma symptoms.

As the location of victimisation was explored based on whether young people were ever victimised in the school *and* the community (i.e., a dichotomous

variable), further quantification of the amount of victimisation experienced in different settings may reveal additional complexities within these findings. This could not be reliably explored within the current research as location was only assessed in relation to the last time each type of victimisation occurred. This should therefore be followed up in further research.

These research findings again highlight the importance of a comprehensive assessment of the young person's victim experiences when working to prevent or reduce its impact on their well-being. A young person's response and ability to cope with victimisation is likely to be influenced by a number of elements, and these findings show how an inability to escape victimisation within the school or community environments is an important factor. Therefore, the experiences of the young person need to be viewed holistically, across differing levels of their ecology, in order to better understand their response and help them cope with their experiences.

In summary, the above findings relating to extrafamilial victimisation and psychological well-being provide support for the ecological theory as a framework for understanding this relationship. The analysis shows how factors experienced within different levels of the young person's ecology can interact to increase or reduce the impact of extrafamilial victimisation on psychological well-being. Specifically, victimisation experienced in more than one area of the young person's exosystem (location) appears to exacerbate the effect it can have on the young person. At the same time, there appears to be some level of interaction between extrafamilial victimisation and factors within the young person's microsystem in the form of social support, yet further exploration of this area is needed before any

conclusions can be drawn. Based on these findings, the relationship between victimisation and outcome does not appear to be straight forward and as such, there appear to be opportunities in which to intervene in this relationship to reduce its impact. Further research should therefore be carried out along these lines of investigation.

It must be noted that the data used in this study was cross-sectional in design and temporal causality between victimisation and outcome could not be established. It may be that young people with greater trauma symptoms were more likely to experience victimisation, rather than this being an outcome of victimisation. It was also impossible to establish the temporality of the relationship between victimisation, SS and outcome. Future longitudinal research should therefore be carried out to explore this in more detail. In spite of this, the research findings are in line with the longitudinal research already carried out in this area which has demonstrated the causal impact of extrafamilial victimisation on future psychological well-being (e.g., Reijntjes et al., 2010; Taylor et al., 2013).

It must also be noted that the overall regression models on which the above analysis was based did not account for any more than 20% of the variance for any outcome. This suggests there must be other factors that have not been measured in this study which account for a large proportion of this relationship. One such factor could be intrafamilial victimisation which was not measured in the current research and was therefore not controlled for. As a result, this should be taken into account when interpreting the findings of the current research and when conducting further research in this area. Whilst a number of demographic variables were explored and controlled for in this analysis, future research should also aim to explore the impact of other factors, such as family support, neighbourhood context, and the disclosure

of victimisation, etc. Nevertheless, the current findings are in line with other research findings in this area (e.g., Finkelhor et al, 2009b; Turner et al., 2011) where regression models which have included intrafamilial victimisation have also accounted for only 17% - 24% of the variance in trauma symptoms.

Finally, power analyses revealed that the number of young people included in this analysis was only enough to detect large effect sizes within the data. Therefore, the analysis may have lacked the power to detect significant interactions which may have accounted for the number of non-significant findings between different types of victimisation, the impact of poly-victimisation, and the role of SS on psychological well-being. It may also account for some of the differences between the findings of this study and other research in this area which used a larger, more representative sample of young people.

Regarding the practical implications of the above findings, they suggest that the victim experiences of young people need to be fully assessed when attempting to explore the impact victimisation has had, or may have, on their psychological well-being. The specific elements of extrafamilial victimisation should also be investigated as it seems that different types of victimisation, the amount of victim experiences and when they were experienced, and the places in which a young person has been victimised, can all exacerbate or influence outcome. Gaining a comprehensive understanding of these factors can help develop a more tailored, informed approach to designing interventions to meet the needs of the young person and address any problems suffered as a result of exposure. At the same time, protective factors within the young person's microsystem should be explored to maximise their effect and promote resiliency against the negative impact of victimisation. As such, the environmental and personal context surrounding the

victimisation experiences of the young person need to be understood to adequately understand its impact. With a better understanding, practitioners will have a greater awareness of the effect of victimisation and be better informed to look out for signs that the young person is suffering. As a result, the impact of extrafamilial victimisation may be reduced, as may the risk of further victimisation.

5.10. Strengths and Limitations of Study one

The main strength of study one is that it provides one of the first holistic investigations of the prevalence of extrafamilial victimisation amongst a large sample of young people in England. Consulting the CAHRV guidelines (Martinez et al., 2007) in the design and planning of this research, a comprehensive assessment of extrafamilial victimisation was carried out using a previously designed questionnaire which allowed for national and international comparison of the findings. This contrasts to other UK studies which have mainly focussed on one specific category or type of extrafamilial victimisation. The current research also provides a more detailed exploration of the characteristics of the perpetrators of extrafamilial victimisation, the role of gender in the prediction of further victimisation, and the prevalence of poly-victimisation and the characteristics of poly-victims, all of which have been largely neglected in the UK empirical research literature. It also adds to the small amount of literature in the UK which explores the locations of victimisation, the risk factors for victimisation in the community, and the prevalence and risk factors associated with victimisation on the journey home from school. This is done in line with the RAT of extrafamilial victimisation and is therefore embedded within a theoretical framework to improve our understanding in this area. Finally, the research investigates the association between extrafamilial victimisation

and psychological well-being, investigating the impact of poly-victimisation, social support and victimisation experienced in multiple locations on this relationship. In doing so, the research contributes a number of findings to the current literature in this area within the UK, addressing a number of important gaps in our knowledge.

The ethnic composition of the sample used in this research was representative of the county from which it was taken ("Rugby Borough Equality & Diversity Profile, May 2011 ", 2011). Additionally, the targeted age range of participants (13-15 years) means that age effects should have little influence on the findings of the research and they can therefore be extrapolated more reliably to the age group tested. This does limit the findings of the research to this age group however, due to developmental effects on victimisation. Additionally, the county used in the research is not representative of all English counties and the findings may therefore be sample specific. Using the index of Multiple deprivation for 2010³¹ (Department for communities and local government, English indices of deprivation, 2010; closest available figure for the timeframe of the research), the ranking of the the area including and surrounding each school (Lower Layer Super Output Area; LSOA) can be placed within the overall ranking of LSOA areas within England. A rank of 1 is the most deprived and 32482 the least deprived. Seven of the schools within this research have rankings of between 21068 and 31916, with one school achieving a lower ranking of 15893. Therefore, they were within the top third of the least deprived areas in England and are therefore not representative of the bottom two thirds of areas in the UK with higher multiple deprivation scores. Looking at the rates of lone parenting in these areas (Office of National Statistics, 2011 Census for

³¹ Based on seven domains relating to: income, employment, health and disability, education, skills and training, barriers to housing and services, crime and living environment.

the Rugby area (2011)), the number of lone parents ranged from 23-50, with an average of 38 and standard deviation of 10.58. This indicates a large amount of variability in the current study and is lower than the average number of lone parents within all of the LSOAs for England, which is 48.

Based on Home Office data for the total recorded crime in England in 2010 to 2011 (Chaplin et al., 2011), the total number of recorded crime for the county included in this research was 32,827. This suggests that this country faces a third less crime than the average crime rate in England (99,712). More detailed figures from the Warwickshire police force website (<http://www.police.uk/warwickshire/rte/crime/2011-12/+4NgGTK/>) show that the number of recorded crime occurring within a one mile radius of each school's postcode over the nine month data collection period for this study (December 2010-July 2011) ranged from 472 to 2329.

These differences between the sample characteristics and population characteristics for England influence the generaliseability of the research findings at a National level. The sample also relied on young people attending mainstream schools who were present on the day of the survey(s), despite attempts to broaden inclusion (see chapter 3, section 3.5.). The research is therefore likely to under-represent the victim experiences of the most vulnerable young people with poor or no school attendance. Indeed, it may be these young people who are the most likely to have lower levels of social support, less guardianship and protective factors relating to the family, who may spend more time in the community due to their non-attendance at school, and who may face higher levels of victimisation. Further exploration of these issues should therefore be carried out with a sample of vulnerable, specially educated young people and the research should be replicated

on additional English populations to explore its validity. Nevertheless, the patterns of victimisation found in the current study are largely in agreement with those reported by the NSPCC research which was carried out on a nationally representative sample of young people in the UK (Radford et al., 2013).

The current investigation was based on the routine activities theory and ecological theory of extrafamilial victimisation, and the research was therefore embedded within two popular, empirically supported theories within the existing research literature. This contextualises the findings of the research and shows how they could be used to develop holistic interventions to prevent victimisation and address its impact. Using two different theories of extrafamilial victimisation, the benefits of both are maximised in terms of aiding our understanding in this area. The routine activities theory provides a coherent structure to aid our understanding of the processes involved in extrafamilial victimisation within the school and the community. The ecological theory brings together different elements of the young person's ecology to aid our understanding of the impact extrafamilial victimisation may have on the young person's psychological well-being and the different factors which may exacerbate and influence this relationship. By drawing upon more than one theory of victimisation, this has therefore enhanced the depth and level of understanding of the current research.

The findings from this research also had applied practical benefits for the schools, Safer School Partnership (SSP), and police force involved. The project meet many of the aims of the SSP, such as providing a focus on: pupil victimisation within the school and community; improving the safety of pupils and staff within the school and community by dealing with issues of pupil safety on journeys to and from school and identifying geographical victimisation hotspots; and helping

identify risk factors for victimisation. The findings were reported back to each school on an individual level, thus providing information on the extent and types of victimisation and offending that occur on their premises and the surrounding area. In doing so, a more accurate understanding of the victimisation experiences of the young people within their school could be determined. In turn, this has the potential to improve school safety procedures by establishing the times of the school day when children are more at risk, where they are at risk within the school premises, and the types of victimisation they are most at risk from. Additionally, the police force involved in this project was informed of the outcome of the geographical analysis of the locations in which young people reported being victimised. This allowed for a more targeted police presence in the areas of the community in which young people reported being victimised the most.

In spite of these strengths, there were a number of limitations of the current research which impact on the findings reported. Firstly, the research is cross-sectional and therefore any relationships found in the data do not provide indication of causality. The data collected was also based wholly on self-report measures and this may have introduced a level of response bias and common method variance into the findings. Nevertheless, participants were reporting on victimisation in multiple contexts and multiple respondents would therefore have been needed should there have been an attempt to collect data from other sources. Young people were also deemed to be optimal informants when reporting on concepts such as psychological well-being. A social desirability scale was included and the under- and hyper-response scales from the TSCC-A were used to remove participants from the sample if their answers suggested they were responding in a socially desirable way. This therefore attempted to increase the reliability of this self-reported data. Additionally,

exploration of the impact of common method variance on the correlation between variables suggests that this may be less of a problem than is commonly assumed and accepted (Spector, 2006).

An important limitation of this research is the omission of intrafamilial victimisation. A lot of the experiences young people have had will have therefore been excluded and the true extent of their victimisation will have been minimised. This is a problem when it comes to looking at the relationship between victimisation and mental well-being, for example, as it means a number of additional victim experiences could not be controlled for. Consequently, this may explain some of the discrepancies found between this study and the studies by David Finkelhor and his team and the NSPCC (Radford et al., 2013), as discussed previously. The argument made for the exclusion of intrafamilial victimisation in the current research was based on the need to provide a thorough exploration of extrafamilial victimisation before a more holistic approach can be adopted. This research goes some way towards achieving this goal and further replication and exploration of these findings should be carried out to develop our understanding of the prevalence, characteristics and impact of extrafamilial victimisation. When our knowledge and understanding of extrafamilial victimisation has developed to the same level as that for intrafamilial victimisation, progress in the holistic exploration of all childhood victimisation can be more reliably made.

Additionally, the JVQ follow-up questions asked specifically about the last time each type of victimisation happened. As such, the data is able to show a pattern of victimisation characteristics (e.g., characteristics of the offender, locations of each type of victimisation, etc.), but does not reflect a comprehensive assessment of all the times young people were victimised. As a result, some findings, such as whether

young people were victimised in both the school and the community, may not be a comprehensive representation of all the participant's victim experiences. The pattern of response to the JVQ follow-up questions also suggests some young people were answering for more than just their last victim experience. This reflects how difficult it can be to separate out incidents of victimisation which are often interlinked and form a series of on-going events (such as bullying, Olweus, 1991). However, differences between those young people who appeared to be responding for the last time something happened and those who appeared to have answered for more than one event were investigated and found to be minimal.

When attempting to define victim experiences according to definitions commonly used by law enforcement personnel (e.g., 'robbery'), there is a danger of overstating the 'minor' incidents occurring amongst young people. For example, a young person who has a pencil snatched and stolen from them at school is, by definition, a victim of robbery. However, this particular incident would be unlikely to be deemed a robbery in the criminal sense due to the value of the object stolen and the context in which it occurred. This is something that has been pointed out in other victimisation research (see Garrofalo et al., 1987) and should therefore be taken into account when interpreting the results of this study.

The number of statistical analyses carried out within this thesis increased the likelihood of identifying a significant outcome, thus increasing the chance of Type I error. An attempt was made to address this by reducing the alpha values used to identify a significant outcome to $p < 0.01$. It must be noted however that the confidence intervals around many of the prevalence figures were large, primarily as a result of clustering within the data. This reduces the certainty that the prevalence

figures identified represent the true value within the target population, and should be borne in mind when interpreting the findings.

5.11. Conclusions

The findings from study one provides insight into the prevalence, characteristics and impact of extrafamilial victimisation amongst an English sample of young people. In doing so, they reveal a number of factors which appear to be influential on a young person's risk of victimisation and the outcome of victimisation on their psychological well-being. As a result, a more holistic understanding of the victimisation experiences of this current sample can be gained which has implications for the development of empirically informed intervention and practice. However, the limitations of the research as discussed throughout this chapter need to be considered when interpreting these findings. A thorough discussion of the implications of this research on future research and practice is provided in chapter 7 (Sections 7.4. and 7.5.) alongside the implications of the second study.

Chapter 6: Study Two. Risk and Protective Factors for the Victimization of Young People in the School and Community Environments: A Systematic Review of Predictors and Interacting Variables.

6.1. Introduction to the review

A large systematic review was carried out for the second study within this thesis (secondary empirical research). The aims of this review were to synthesise the risk and protective factors for extrafamilial victimisation alongside the mediating and moderating variables found. It also aimed to investigate the quality of the longitudinal research in this area. The specific objectives relating to these aims are outlined below.

6.2. Objectives of the review

Objective 1. To explore the quality of the longitudinal research investigating the predictors of extrafamilial victimisation?

Objective 2. To synthesise the findings on the risk factors for extrafamilial victimisation?

Objective 3. To synthesise the findings on the protective factors against extrafamilial victimisation?

Objective 4. To explore and synthesise the research findings on the mediating and moderating variables which impact on the relationship between predictive variables and extrafamilial victimisation?

6.3. Methods

It can be argued that different risk and protective factors are likely to operate depending on whether abuse or victimisation is perpetrated by family members or people outside of the home (Black et al., 2001; Fischer & McDonald, 1998). This review is therefore limited to extrafamilial victimisation to increase the specificity of the findings. All forms of extrafamilial victimisation were explored in this review (bullying, peer victimisation and peer harassment; violent victimisation and community violence; 'conventional crime'; and sexual victimisation/ abuse and sexual harassment) as the development, aetiology and risk factors for these types of victimisation are likely to overlap (Finkelhor, 2008). However, dating violence was excluded as it possesses a relational element committed by a known intimate. This sets it apart from other forms of extrafamilial victimisation (where the perpetrator could be a stranger) and the risk and protective factors may therefore differ.

The review was carried out to generate hypotheses about causal relationships between predictors and outcome (extrafamilial victimisation). This was based on a theoretical understanding of extrafamilial victimisation (RAT and ecological theory) which was used to drive the review and interpret the findings. As such, it was important that a representative sample of studies was collected and the methodology used therefore aimed to identify all of the available literature in this area.

Additionally, the mapping of the review was outlined a priori and it was determined that the broad research question to be addressed by the review ('what are the risk and protective factors for extrafamilial victimisation?') would lead to two narrower research syntheses: the first addressing risk; and the second addressing protection.

Based on the above, the type of review carried out comes under the definition of an 'aggregative systematic review'. This is described in the paper by

Gough, Thomas, and Oliver (2012), based on the definition of an aggregative systematic review outlined by Voils, Sandelowski, Barroso, and Hasselblad (2008), as follows:

‘Reviews that are collecting empirical data to describe and test predefined concepts can be thought of as using an ‘aggregative’ logic. The primary research and reviews are adding up (aggregating) and averaging empirical observations to make empirical statements (within predefined conceptual positions).’

The following sections of this review explicitly outline the steps taken to search for, collect and appraise research articles, synthesise their research findings, and communicate the results, as outlined by Gough (2007).

6.3.1. Criteria for considering studies for this review.

The inclusion criteria for the review, search terms, and search strategy were all piloted and refined upon completion of a scoping exercise. The criterion for including studies in the review (PECO) is outlined in Table 34 below.

6.3.2. Search methods for identification of studies.

The review protocol was developed and an Information Specialist at the University of Nottingham was consulted to ensure the sensitivity (the ability of the search to find all of the relevant studies) and specificity (the ability to exclude non-relevant studies) of the search terms.

6.3.3. Inclusion and exclusion criteria.

A formal inclusion checklist was designed (see Appendix 20) and articles were included if they met the inclusion criteria outlined in Table 34. The full exclusion criteria are detailed in Appendix 21 and outlined in Table 34.

Table 34.

PECO

	Inclusion Criteria	Exclusion Criteria
Study design <i>Design</i> <i>Focus</i>	Prospective cohort, case-control or nested case-control studies <u>AND</u> Minimum one-year follow-up period <u>AND</u> Baseline levels of victimisation controlled for in analysis <ul style="list-style-type: none"> • Onset of victimisation over time • Change in the extent of victimisation over time • Change in the likelihood/presence of victimisation over time 	Cross-sectional research and case studies Reviews and meta-analyses Less than one year follow-up No control over baseline levels of victimisation in the analysis Stability/ chronicity of victimisation
Participants	Children and young people aged 0 -18 years (inclusive) from any background and with any characteristics.	<ul style="list-style-type: none"> • Participants older than 18 years • Participants were part of a related intervention or prevention study
Exposure	<ul style="list-style-type: none"> • Risk factors • Protective factors • Mediating and moderating variables 	<ul style="list-style-type: none"> • Environmental violence such as war or genocide as a exposure • Measuring exposure to prevention or intervention programmes on outcome • Previous victimisation is the only risk/protective factor assessed
Outcome	All forms of victimisation experienced outside of the family (extrafamilial victimisation), measured in any way (questionnaires, interviews etc.).	<ul style="list-style-type: none"> • Dating violence • Victimisation experienced within the family (intrafamilial victimisation) • Victim of environmental violence such as war or genocide

		<ul style="list-style-type: none">• Victim of school shooting• ‘Peer rejection’ or ‘peer problems’• Corporal punishment in schools and families• Honour-based or cultural crimes• Prostitution, sex trafficking and sexual exploitation• ‘Fighting behaviour’ or ‘involvement in fights’• Engagement in ‘risky behaviour’• Perpetration of ‘offending’, ‘violence’ or ‘aggression’• ‘Dating violence’ or ‘intimate partner violence’
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6.3.4. Electronic searches.

A total of 12 electronic databases were searched (Cochrane library; PsycINFO; PsycARTICLES; PubMed; Web of Science; ERIC (Educational Resources Information Centre); SCOPUS; ASSIA; Applied Social Sciences Index and Abstracts; International Bibliography of the Social Sciences (EBSCO); Social services abstracts and sociological abstracts; ProQuest dissertations & theses) for articles published between 1 January, 1990, and 7 October, 2011. The majority of prospective longitudinal studies in this area were conducted post 1990 so these limits were set to increase specificity.

Three sets of keywords were combined using AND operators to define the population, exposure and outcome for the review. Both indexed terms and free terms were searched where possible:

- Population: Child* (Indexed term) OR Adolescent* (Indexed term) OR Teen* (Indexed term) OR Youth (Indexed term) OR Boy* (Indexed term) OR Girl* (Indexed term) OR Juvenile* (Indexed term)
- Exposure: Risk* (Indexed term) OR Protect* (Indexed term) OR Predict* (Indexed term)
- Outcome: “community violence” OR bully* OR bulli* (Indexed term) OR “peer victimization” OR “peer victimisation” OR (peer AND victimi?ation) OR ((violen* OR crime) AND (school OR community)) OR ((Victim* OR Crime Victim*) AND (School OR Community))

See Appendix 22 for the full search strategy and outcome for each database.

6.3.4.1. Grey literature

A total of seven governmental and child protection focused charity websites were searched (4th and 5th September, 2012) for research reports (World Health Organisation, Home Office, NSPCC, Save the Children, Action for Children, Barnados, UNICEF). See Appendix 23 for the full search strategy and outcome for each website.

6.3.4.2. Reference lists

The reference lists of 17 reviews identified through scoping were searched, leading to the identification of an additional 54 articles. Following deletion of those which were obviously not relevant (e.g. cross-sectional), the full texts of 27 articles were collected and formally reviewed for inclusion.

6.3.4.3. Expert contact

Six experts in the field were contacted to identify any other published or unpublished research (1st October, 2012). From this only three experts responded, none of whom provided any further research for inclusion in the review.

6.3.5. Data collection and analysis.

The search strategy and process was developed and executed by the researcher at each stage. Articles written in a foreign language were retrieved and considered for inclusion.

6.3.5.1. Selection of studies.

Studies were included in the review provided they met the conditions specified on the inclusion checklist (see Appendix 20) and rejected the exclusion criteria (see Appendix 21). As a measure of inter-rater reliability, an independent

reviewer applied the inclusion/exclusion criteria to a random 10% of the collected electronic articles ($N = 1,750$). Both raters were in 100% agreement as to the inclusion/exclusion of articles.

6.3.6. Assessment of risk of bias in included studies.

A specific quality assessment checklist (see Appendix 24) was designed based on the Critical Appraisal Skills Programme (CASP) Cohort study quality assessment form (http://www.casp-uk.net/wp-content/uploads/2011/11/CASP_Cohort_Appraisal_Checklist_14oct10.pdf) and the ‘STrengthening the Reporting of OBservational studies in Epidemiology’ (STROBE) guidelines for effective reporting of observational epidemiological studies (von Elm et al., 2007). In addition, a systematic review of quality assessment tools was consulted (Sanderson, Tatt, & Higgins, 2007). Specific classification, methodological, and assessment issues relevant to research in this area were then adapted into the quality assessment checklist, which was then piloted and refined.

A number of arguments have been made to suggest quality assessment should be based on key areas of bias and not the use of a points system (Sanderson et al., 2007; Stroup et al., 2000). On this basis, the 27 items on the checklist were used to help lead to a decision on the risk of bias (low, unclear or high risk of bias) in the following seven areas: population; predictor measurement/classification; outcome measurement/classification; attrition; analysis; reporting; and confounding. This system is based on the Cochrane Collaboration’s bias assessment tool (Higgins & Altman, 2008). Each study was also awarded a possible score of 0-14 based on the sum of scores for each of the seven areas (low risk of bias = 0, unclear = 1, high = 2); higher scores indicated a higher risk of bias. Systematic error (defined as

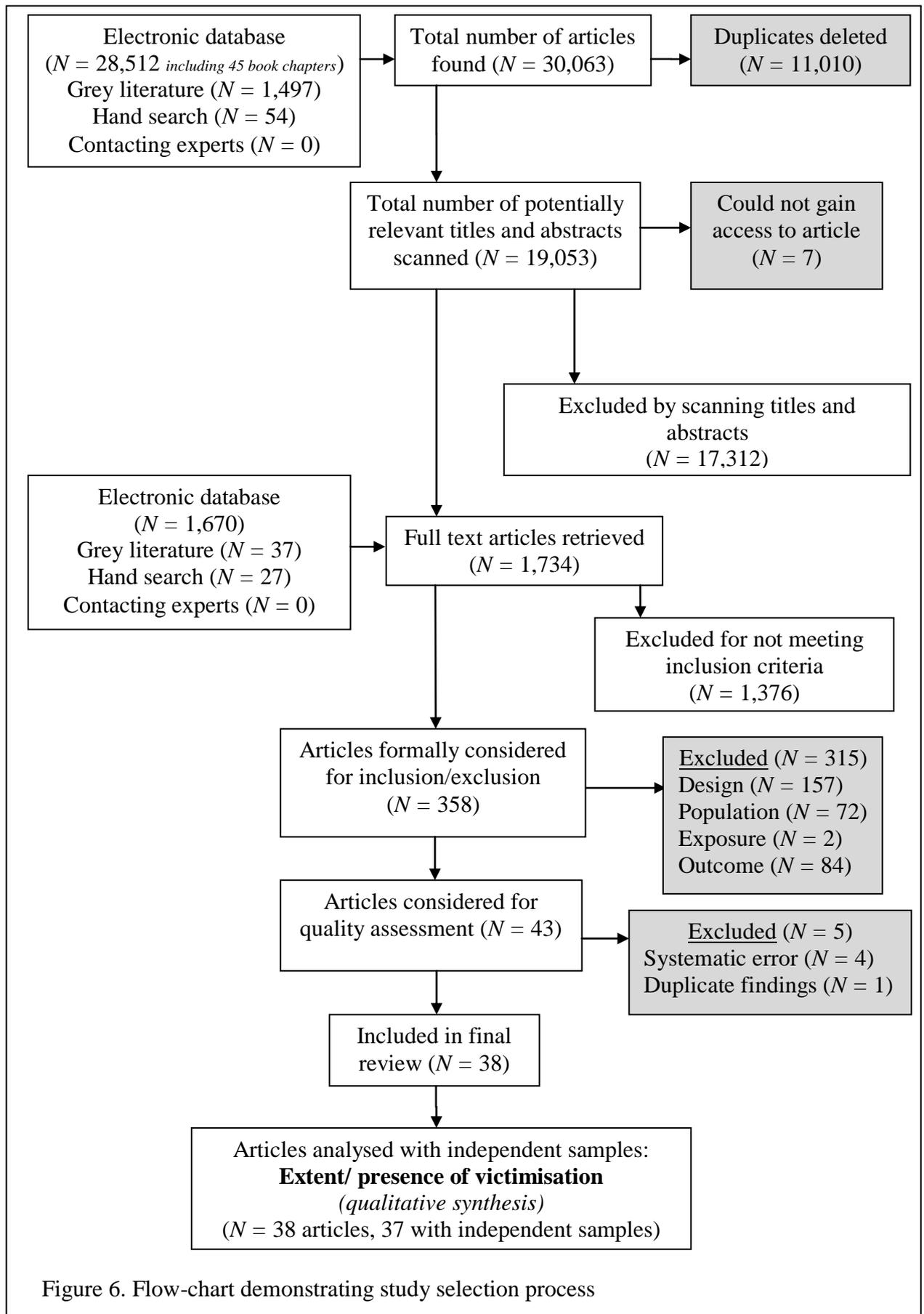
substantial error in methodology or analysis which undermines the study's findings) was also taken into account.

The quality assessment checklist was applied to all studies by the researcher and a second researcher independently reviewed 22% ($N = 8$) of the included articles using the same quality assessment checklist. Prior to discussion, Cohen's kappa coefficients (k) ranged between 0.11 to 0.71 for the individual areas of bias assessed, which suggests slight to substantial agreement between researchers (Viera & Garrett, 2005). All disagreements between researchers were resolved through discussion however, leading to a final 100% agreement on all areas of bias³².

6.3.7. Results of the search.

Figure 6 presents a flow-chart of the study selection process. The search process led to the identification of 19,053 references once duplicates had been removed. The titles and abstracts of each of these were reviewed to exclude those which were obviously irrelevant ($N = 17,312$). The full text of 1,734 articles was then collected to assess suitability for inclusion in the review. This led to the further removal of 1,376 studies and the formal inclusion checklist was then applied to 358 articles. Of these, only 43 met the criteria to go through to the quality assessment stage.

³² All articles were quality assessed by the first reviewer prior to quality assessment of the 22% of articles completed by the second reviewer. Following discussion, agreement between researchers was based on an agreement with the way in which the first researcher carried out the quality assessment. As such, the initial disagreement between reviewers is unlikely to influence the consistency of the quality assessment for the articles included in this review.



Systematic error was identified in four studies in terms of; the way in which the data was analysed ($N = 1$), assessment of victimisation was actually assessing the *risk of* victimisation ($N = 1$), criteria for assigning victim status changed from baseline to follow-up ($N = 1$), and the participants were added at each wave which would have masked effects ($N = 1$). They were therefore excluded.

Finally, one study was excluded (Boivin, Hymel, & Hodges, 2001) as it used a sub-sample of the main sample used in another included study (Boivin, Hymel, & Hodges, 2001; Boivin, Petitclerc, Feng, & Barker, 2010), both of which assessed the same risk factors (with further risk factors assessed in the 2010 study using the main sample). This was done on the assumption that the majority of participants in the 2001 study will be included in the 2010 study thereby violating the assumed independence of the data should both sets of results have been included³³.

It was not possible to access the full-text of seven articles, yet there was ambiguity as to their relevance based on their title and abstract.

The study selection process left a total of 38 articles included in the final review. In cases where the same sample was used in more than one included publication ($N = 8$), the following steps were taken to minimise violating the assumption of sample independence. The findings of two studies using the same sample (but presenting different research findings) were merged together to create one overall study (Kelly, Schwartz, Gorman, & Nakamoto, 2008; Schwartz,

³³ It should be noted that a small sample of young people from grade 2 in the 2001 study (exact number is unknown) are excluded from the current review as these were not assessed in the 2010 study.

Gorman, Nakamoto, & Toblin, 2005. Referenced as Kelly et al., 2008, throughout the review). The remaining six studies were based on three samples and each sample was used in two publications; one publication used the full sample whilst the second publication used a sub-sample (Boivin et al., 2010; Goldner, Peters, Richards, & Pearce, 2010; Hodges et al., 1999; Kochenderfer-Ladd, 2003; Ladd & Burgess, 1999; Sweeney, Goldner, & Richards, 2011). It is unknown whether the findings from the sub-sample can be extrapolated to the full sample, so each of these six studies were treated independently providing there was no overlap in the risk/protective factors assessed (Goldner et al., 2010; Kochenderfer-Ladd, 2003; Ladd & Burgess, 1999; Sweeney et al., 2011). If there was an overlap, only the findings from the study using the full sample (for that specific risk factor) were included in the review (Boivin et al., 2010; Hodges et al., 1999). As before, this decision was made under the assumption that the full sample would have incorporated those from the sub-sample. The additional findings based on the sub-sample were reported for each study. This method introduces an element of overlap when describing the characteristics of included studies and their associated bias (as each sample will be counted twice) but there is no overlap in the discussion of their findings. This resulted in 37 'independent' studies being included in the review.

6.3.8. Data extraction.

Following scoping and piloting, a standard data extraction form was developed and applied to all included studies by the lead researcher (see Appendix 25). When information was missing in an article, authors of studies were contacted and if the information was not provided after one month, the data was classified as 'missing' or 'unknown'.

6.3.9. Data synthesis.

Narrative synthesis was carried out and reported p-values were used to indicate the significance of each variable as a predictor of victimisation (a significant result was defined for this review as $p < 0.05$). Where effect sizes were reported in the original study, these are also reported in the results section of this review (Tables 37 and 38). Missing data was highlighted in the write-up. By conducting qualitative data synthesis, the level of detail permitted to describe the findings is increased and the impact of mediating and moderating variables and confounding factors can be examined more deeply.

Meta-analysis was deemed to be inappropriate for a number of reasons. It was not possible to convert findings on the predictive ability of a variable into a common effect size due to a large amount of missing data (such as standard error, standard deviation and exact p-values) and reporting bias. This would have meant that studies would have been excluded (subjecting the review to bias) and/or the meta-analysis would have been based on estimated results (based on estimated standard error and p-values). Where authors have conducted previous meta-analyses in this area (Cook et al., 2010; Reijntjes et al., 2010), the identified predictors have been grouped together into overarching categories (e.g., ‘internalising behaviour/problems’, ‘family/home environment’ etc.). This provides an overview of the effectiveness of different *categories* of predictive variables, yet the combined variables based on a range of individual factors may be questionable. The ability to provide detailed information on predictors is also compromised, as is the impact of mediating and moderating variables. The utility of the findings from meta-analysis to improve the prevention of extrafamilial victimisation is therefore limited.

6.3.9.1. Subgroup analysis

Given the perceived heterogeneity of studies in the literature, sub-group analysis was anticipated based on:

- Outcome; type of victimisation assessed (violence, bullying, sexual violence, ‘crime’) and the extent of victimisation assessed (e.g., direct versus indirect).
- Gender of participants

Where possible, results were grouped and explored in relation to specific outcomes and gender to assess sub-group effects.

6.4. Results

6.4.1. Description of studies.

See Table 35 for details of the characteristics of the included studies.

6.4.1.1. Included studies.

Five of the included studies were unpublished theses and 32 were published in peer reviewed journals. All of the articles were written in English, with the exception of one (Zongkui, Dongmei, Xiaojun, & Xianfeng, 2006) which was written in Chinese (and translated for inclusion in this review).

No study was identified which followed a cohort of young people from birth to assess the onset of *first-time* victimisation. Instead, three prospective, longitudinal, cohort studies were identified, all of which looked at change or stability in victim status from ‘non-victim’ at baseline to ‘victim’ or ‘non-victim’ at follow-up. None of these studies assessed lifetime levels of victimisation at baseline and can therefore report only on the onset of victimisation over the course of the study. From these studies, only the findings for the baseline ‘non-victim group’ were

included in this review as the review was interested in change overtime based on initial 'non-victim' status (i.e., the 'onset' of victimisation)³⁴. The remaining 34 cohort studies assessed a change in the extent of victimisation over time, or assessed a change in the presence of victimisation at follow-up for the whole group (not defined into specific victim or non-victim groups at baseline).

³⁴ It was not possible to separate out the sample characteristics of this group of young people and the descriptions of the included samples therefore reflect the total samples used in these studies, including 'victims' at baseline.

Table 35

Characteristics of Included Studies Assessing Change in the Extent or Likelihood of Victimization

Author, date & country	N	Participant characteristics (at baseline)	Retention rate (%)	Interval between T1 & T2	Victimization outcome	Informant	Common method variance	Adjustment for confounders	Risk factors	Protective factors	Mediating/moderating factors
Barker , Boivin, Brendgen et al. (2008) Canada	1970	Early childhood: Mean 4.5 months old, 51% male, Community-mixed representative sample, Representative, 81% French speaking, mixed SES	93	5.6- 6.5 years (depending on when the risk factor was assessed) (8x 1 year intervals)	<u>Peer victimisation:</u> Direct physical, emotional and relational. School/ day-care victimisation. Unknown duration. Further victimisation. Frequency measure. Participants are categorised into groups according to victimisation trajectory; low/increasing, moderate/ increasing & high/chronic.	Self, parent, teacher.	N	N	<u>Low/increasing Vs. high/chronic:</u> <i>Individual:</i> Gender, Physical aggression*, Hyperactivity, Internalising symptoms <i>Contextual:</i> Insufficient family income*, Harsh reactive parenting*, <u>Moderate/increasing Vs. high/chronic:</u> <i>Individual:</i> Same as above but all non-significant. <i>Contextual:</i> Insufficient family income, Harsh reactive parenting*	N	N
Bellmore (2001) USA	273-315 (depending on complete data at that wave)	Middle childhood: 6 th grade, ? Gender, Suburban sample, ? ethnicity, Middle income	56 - 62	1 year (2x 1 year intervals, but only one of them is useable)	<u>Peer victimisation:</u> Direct 'General', physical and relational victimisation only. Unspecified location. Victimisation reflects current experiences. Further victimisation. Frequency measure. Separated outcome according to school grade	Peer	N	N	<u>Grade 6:</u> <i>Individual:</i> Meta perception accuracy (accurate knowledge of how well liked or disliked they are by their friends)* <u>Grade 7:</u> <i>Individual:</i> Meta perception accuracy of affect (accurate knowledge of how well liked or disliked they are by their friends)	N	N

^{a,b} Boivin, Petitcherc, Feng & Barker (2010) Canada	1035	Middle childhood: 3 rd grade, Mean 9 years, ? gender, ? sample, ? ethnicity. Varied SES	84	1 year (3 x 1 year intervals)	<u>Peer victimisation:</u> Direct physical and emotional only. School based, Unknown duration, Further victimisation, Frequency measure. Looked at predictors at grades 3, 4, & 5 (waves 1, 2, & 3) to predict victimisation at grades 4, 5, & 6, respectively.	Peer	Y	N	<i>Individual</i> Aggression, Withdrawal*, Emotionality*, Gender*.	N	N
^a Hodges, Boivin, Vitaro & Bukowski (1999) Canada	393	Middle childhood: Mean 10.7 years, 4 & 5th grade, 48% male, urban, primarily white, diverse SES	74	1 year	<u>Peer victimisation:</u> Direct physical and emotional. Unspecified location. Victimization reflects current experiences. Further victimisation. Frequency measure	Peer	N	Gender, age	<i>Individual:</i> Internalising problems*, Externalising problems*,	<i>Contextual</i> : Best friendship*	<u>Moderator:</u> Having a best friend <i>moderated</i> the relationship between internalising problems and victimisation.
Cappadocia (2008) Canada	1,790 (Gender and frequency analysis) 1,801 (Grade analysis)	Adolescence: 9-11 th grade. 44% male, ? sample, Majority ethnicity (91% Canadian), ? SES	98	1 year	<u>Cybervictimisation:</u> Direct cybervictimisation, Victimization in the past 2 months. Dichotomises outcome into victim and non-victims. 'Victims'= those who report any incident of victimisation. Assesses change in victim status from baseline to follow-up (onset).	Self	Y	Cyberbullying, Gender	<i>Individual factors:</i> Gender*, Grade, Frequency of Internet use, Anxious and somatic symptoms (sig for females only)*, Depressive symptoms*, <i>Contextual factors:</i> Experience with traditional forms of victimisation*.	N	N

Farrell & Sullivan (2004) USA	922	Middle childhood: 6th Grade, 48% male, rural, 63% white, 60% free school lunch, excluded special education classrooms	63	3 years	<u>Violent victimisation:</u> Witnessed violence on stranger or known person. Unspecified location. Lifetime victimisation. Frequency measure. Further victimisation	Self	Y	Gender	<i>Individual:</i> Gender*, Delinquent behaviour*, Attitudes supporting violence*, Drug use, Aggression,	<i>Individual:</i> Attitudes supporting non-violence*	N
Geiger (2003) USA	458	Middle childhood: 3 rd Grade, 46% male, Urban and suburban sample, Mixed ethnicity (46% Caucasian, 24% African American, remaining mixed ethnicity) ? SES	80	3 years (1 & 2 year intervals)	<u>Peer victimisation:</u> Direct relational and physical victimisation only (outcome separated according to victimisation type). School based. Unknown duration. Frequency measure. Further victimisation.	Peer	Y	Gender	<u>Physical Victimization</u> <i>Individual:</i> Gender*, Relational aggression, Physical aggression. <i>Contextual:</i> Peer acceptance*, Mutual friendship*, Peer rejection, Neglected peer status group (low acceptance and rejection), Controversial peer status group (high acceptance and rejection). <u>Relational victimisation</u> <i>Individual:</i> Gender, Relational aggression, Physical aggression. <i>Contextual:</i> Peer acceptance*, Mutual friendship*, Controversial peer status group*, Rejection, Neglected peer status group.	<u>Physical Victimization</u> <i>Individual:</i> Prosocial behaviour* <u>Relational victimisation</u> <i>Individual:</i> Prosocial behaviour, Relational aggression*, Physical aggression* <u>Physical victimisation</u> <u>Moderator:</u> Gender as a moderator of peer acceptance* <u>Relational victimisation</u> <u>Moderator:</u> Gender as a moderator of pro-social behaviour*	

Georgiou & Fanti (2010) USA	895	Middle childhood: mean age 7 years, 1 st grade, 50% male, Urban sample, 76.5% white, 3.6 times the US poverty threshold, Excluded disabled children and mothers and children who did not speak good English	66	5 years (1 & 2 year intervals)	<u>Peer victimisation:</u> Direct, physical, relational and emotional. School based. Victimization within the past 6 months. Frequency measure. Further victimisation.	Self	N	Gender	<i>Individual:</i> Gender <i>Contextual:</i> Maternal conflict*, Maternal involvement,	N	<u>Moderating:</u> Gender tested as a <i>moderator</i> of the impact of maternal conflict and maternal involvement (NS)
Goldbaum, Craig, Pepler & Connolly (2003) Canada	1,145	Middle childhood: 5, 6, 7 th grade. 53% male, urban, Majority ethnicity, Diverse SES	95	1 year	<u>Peer victimisation:</u> Direct physical, verbal. School based. Victimization in the past 5 days and over the school year (2 measures). Dichotomises outcome into non-victims and late onset victims. 'Victims' = those who with increasing levels of victimisation over time. Assesses change in victim status from baseline to follow-up (onset).	Self	Y	Gender	<i>Individual:</i> Anxiety*, Withdrawal*, Somatisation*, Bullying* <i>Contextual:</i> (Friendship quality) Alienation*, Aggression*,	<i>Individual:</i> Social self-competence* <i>Contextual</i> : (Friendship quality) Trust, Affection,	N
Greenwald (2004) USA	647	Middle childhood: 6 th & 7 th grade, ? gender, Urban sample,	88	2 years	<u>Peer sexual harassment:</u> Direct. Unspecified location. Past year. Dichotomous outcome.	Self	N/A	N	<i>Individual:</i> Grade*, Gender*	N	N

		Mixed ethnicity, Low income families.			Further victimisation.						
Hodges & Perry (1999a) USA	173	Middle childhood: mean 11.3 years, 3-7th grade, 50% male, urban sample, predominantly white, middle class	75	1 year	<u>Peer victimisation:</u> Direct emotional and physical, school based. Duration unspecified but worded as 'current' victimisation. Further victimisation. Frequency measure	Peer	Y	Gender, grade	<i>Individual:</i> Internalising problems*, Physical strength*, Externalising problems <i>Contextual:</i> Peer rejection*	Reciprocal number of friends	<u>Moderating:</u> T2 peer rejection moderated contribution of T1 internalising problems to victimisation*. T2 peer rejection moderated contribution of T1 physical strength to victimisation*.
Kaltiala-Heino, Frojd & Martlunen (2010) Finland	2,070	Adolescence: Age 15, Grade 9th, 44% male, urban, ? Ethnicity, ? SES, excluded children with mental handicap and severe sensory defect	63	2 years	<u>Peer victimisation:</u> Direct relational, physical and emotional. School based. Victimization in the ongoing school term. Assesses change in victim status from baseline to follow-up. Dichotomises outcome into non-victims and victims. 'Victims' = victimised many times a week/ once a week. Outcome separated according to gender.	Self	Y	Age, parent education, family Structure	<u>Females:</u> <i>Individual:</i> Depression* <u>Males:</u> <i>Individual:</i> Depression	N	<u>Mediator:</u> Socio-demographic variables (age, parental education, family structure) eliminated the significance of depression* to predict victimisation

<p>^aKelly, Schwartz, Gorman & Nakamoto (2008)</p> <p>USA</p> <p>^cSchwartz, Gorman, Nakamoto & Toblin (2005)</p> <p>USA</p>	199	Middle childhood: 8-10 years, Mean 9.02 years, 3 & 4th grade, 52.8% male, urban, mixed ethnicity (representative), 'working poor', 70% free school lunch	83	1 year	<p><u>'Community violence'</u>: direct violent victimisation (incl threat). Community based. Assessed victimisation in the past year. Frequency measure. Further victimisation</p> <p><u>Peer victimisation</u>: Direct, relational, physical, emotional. School based. Unknown exposure. Frequency measure. Further victimisation</p>	Self	N	N	<p><i>Contextual</i>: Peer rejection*</p> <p><i>Individual</i>: Academic functioning, Depression</p>	N	N
<p>^aKochenderfer-Ladd (2003)</p> <p>USA</p>	398	Early childhood: Kindergarten, 50% male, community mixed sample, 77% Caucasian (representative), Representative and diverse SES.	97	1 year (3 x 1 year intervals)	<p><u>Peer victimisation</u>: Direct, physical, relational, emotional, general. School based. Victimization occurring within past few weeks. Frequency measure. Further victimisation.</p> <p>Separated outcome according to wave of study (school grade)</p>	Self	N	Gender	<p><u>Kindergarten to Grade 1</u>: <i>Individual</i>: Aggression*, Asocial behaviour, Gender.</p> <p><u>Grade 1 to Grade 2</u>: <i>Individual</i>: Aggression*, Asocial behaviour, Gender.</p> <p><u>Grade 2 to Grade 3</u>: <i>Individual</i>: Same as above but all non-significant</p>	N	Gender found to moderate the impact of aggression between grade 1 and 2; significant effect for females only.
<p>^aLadd & Burgess (1999)</p> <p>USA</p>	242	Early childhood: Kindergarten, ? Gender, ? sample, 77% European American (representative), ? SES	97	2.4/5 years (4/5 months & 2x 1 year intervals)	<p><u>Peer victimisation</u>: Direct, physical, relational, emotional and general. Unspecified location. Unknown duration. Frequency measure. Further victimisation.</p>	Self	N	N	<p><i>Individual</i>: (Behavioural risk group) Aggressive & withdrawn, Normative.</p>	N	N

Maldonado-Molina, Jennings, Tobler, Piquero & Canino (2010) USA	1,138 (T1), 1,017 (T2), 974 (T3)	Early childhood-adolescence: 5-15 years (mean 9.5), 51% male, urban, 100% Puerto Rican, Around 50% receiving welfare. Excluded development ally and mentally disabled young people.	89 (T2), 86 (T3)	2 years (2x 1 year intervals)	'Community violence': Witnessed, direct, heard about violent victimisation. Community based. Past year. Weighted, frequency measure. Further victimisation.	Self	Y	N	<i>Individual:</i> Gender, Age, Thrill and adventure (sensation seeking) <i>Contextual:</i> Cultural stress*, Coercive discipline*, Peer delinquency*, Negative school environment*,	Quality of peer relationship*	N
Malti, Perren & Buchmann (2010) Switzerland	175 or 152 (T2)	Early childhood: mean 6.1 years, kindergarten, 51% male, ? Sample, ? ethnicity, average SES	87	1 year	<u>Peer victimisation:</u> Direct physical, emotional and relational. School based. Unknown duration. Further victimisation. Frequency measure	Self, teacher, parent	N	N	<i>Individual:</i> Emotional symptoms*, Aggression*, Empathy <i>Contextual:</i> Socio-economic status	N	N
Martin, Huebner & Valois (2008) USA	417	Middle childhood-adolescence: 6, 7, & 8th grade, ? Gender, rural, mixed ethnicity, 52% free school lunch	73	1 year	<u>Peer victimisation:</u> Direct, physical and relational, school based. Split outcome into relational and overt victimisation, Unknown duration. Further victimisation. Frequency measure.	Self	Y	SES, gender, race	N	<u>Overt victimisation:</u> <i>Individual:</i> life satisfaction <u>Relational victimisation:</u> <i>Individual:</i> life satisfaction*	N

Mrug & Windle (2009) USA	593	Middle childhood: Mean 11.8 years, 52% male, urban, 78% African American (representative), heterogeneous SES	84	16 months	'Community violence': witnessed and direct violent victimisation (incl threat). Split outcome according to direct and witnessed victimisation, Community based. Past year. Dichotomous. Further victimisation.	Self	Y	Age, race, gender, income	<u>Direct Individual:</u> Alcohol* <u>Witnessing Individual:</u> Alcohol	N	N
Overbeek, Zeevalkink, Vermulst & Scholte (2010) Netherlands	774	Middle childhood-adolescence: 11-16 years (mean 13.6), 48% male, Urban sample, 93% indigenous Dutch, ? SES	57 (T2), 31 (T3)	1 year (2x 1 year intervals)	<u>Peer victimisation:</u> Direct, relational, physical and emotional. School based. Past 5 days. Frequency measure. Further victimisation.	Self	Y	N	N	<i>Individual:</i> self – esteem	<u>Mediating:</u> Personality type (ego resiliency profiles) mediated the ability of low self-esteem to predict victimisation : Significant predictor for over controlling* adolescents, non-significant predictor for ego resilient and under controlling adolescents
Pelligrini & Long (2002) USA	129	Middle childhood: 5th Grade, 54% male, mainly rural, 95% European American, predominantly middle class	83	2 years (2x 1 year intervals)	<u>Peer victimisation:</u> Direct & indirect physical and emotional. School based. Past year, past 24 hours over 1 month periods and unspecified. Further victimisation. Frequency measure	Self, peer, researcher observation	N		<i>Individual:</i> Gender*, Grade*	<i>Contextual :</i> Reciprocal number of friends, Nominated as liked most by peers*	N

Persson (2005) Sweden	37	Early childhood: 22-40 months (mean 31.7 months), 41% male, community representative sample, mixed ethnicity, mixed SES	80	20 months	<u>Peer victimisation:</u> Direct physical, emotional & relational. Day care based. Past 2 months. Further victimisation. Frequency measure.	Researcher observation	Y	Sociability	<i>Individual:</i> Aggression*,	<i>Individual:</i> Early altruistic behaviour	<u>N</u>
Romero (2007) USA	210	Adolescence: 8 th grade. 66% male, Urban sample, ? ethnicity, Low income families	?	1 year	<u>Peer victimisation:</u> Direct physical and emotional victimisation and 'picked on', School based. Unknown duration. Further victimisation. Frequency measure. Separated outcome into 4 victimisation groups: self-reported; peer reported; received victimisation (reported by victim) by peers within the same school; directed victimisation (reported by the aggressor) within the same school.	Self	N	Gender Cohort	<u>Self-reported</u> <i>Individual:</i> Internalising*, Physical strength, Peer reported aggression, Self-reported aggression*, <i>Contextual:</i> Number of friends, Best friendship maintenance, peer rejection*, Friends victimisation, Physically weak friends, Friends' internalising, Aggressive friends <u>Peer reported</u> <i>Individual:</i> Same as above but all non-significant <i>Contextual:</i> Number of friends, Best friendship maintenance, peer rejection*, Friends victimisation, Physically weak friends, Friends' internalising, Aggressive friends <u>Received victimisation</u> <i>Individual:</i>	<u>Self-reported</u> <i>Individual:</i> Global self-worth (GSW)*, Perception of social competence (PSC)*, <u>Peer reported</u> <i>Individual:</i> Global self-worth, Perception of social competence*, <u>Received victimisation</u> <i>Individual:</i> Global self-worth, Perception of social competence, <u>Directed</u>	<u>Mediator:</u> -friends' aggression and friends' internalising are sig predictors of directed same school victimisation when gender is taken into account* -PSC mediated physical strength (self-reported only [interaction further moderated by gender])* -Maintenance of a best friend mediated physical strength (self-reported only)* and GSW (received same school only)*

									<p>Same as above but all non-significant</p> <p><i>Contextual:</i> Number of friends, Best friendship maintenance, peer rejection, Friends victimisation, Physically weak friends*, Friends' internalising, Aggressive friends*</p> <p><u>Directed victimisation</u></p> <p><i>Individual:</i> Internalising, Physical strength*, Peer reported aggression, Self-reported aggression,</p> <p><i>Contextual:</i> Same as above but all non-significant</p>	<p><u>victimisation</u></p> <p><i>Individual:</i> Global self-worth*, Perception of social competence,</p>	<p>-friends level of aggression mediated physical strength (received same school vict only [interaction further moderated by gender)]*, and GSW (received same school vict [interaction further moderated by gender)]*, -Friends strength mediated GSW (received same school vict only [interaction further moderated by gender)]* -Rejection found to mediate Physical strength (for peer reported vict [interaction further moderated by gender] and received same school vict only)*, GSW (for received</p>
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										<p>same school vict only)*, and self-reported aggression (for directed same school vict) *, -Friends' internalising mediated physical strength (peer reported vict only[interaction further moderated by gender])*,</p> <p><u>Moderator:</u> -Gender found to moderate impact of rejection on peer reported vict (only sig for males)* -PSC moderated GSW (self-reported only) * -Number of reciprocated best friends moderated physical strength (directed same school vict only [interaction further moderated by gender]) * -Friends level</p>
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											of vict moderated self-reported aggression (self-reported vict only [interaction further moderated by gender]) * -Friends strength moderated self- reported aggression (self-reported vict only [interaction further moderated by gender])*. -Friends' internalising moderated GSW (self- reported only [interaction further moderated by gender])*, and self- reported aggression (self-reported only [interaction further moderated by gender])*
Rulison, Gest, Loken, & Welsh (2010) USA	427	Middle childhood: 3, 4, 5th grade. 55% male, Rural, 99% Caucasian, Above	67 over all 6-10 waves (dependi ng on cohort), 95 over 4 or more	4 years (4 x 1 year intervals)	<u>Peer victimisation:</u> Direct emotional and physical, extreme victims. School based. Current victimisation. Dichotomises outcome	Peer	Y	Gender	<i>Individual:</i> Peer reported aggression*, Gender* <i>Contextual:</i> Peer group aggression*, Changes in current and past group aggression	N	<u>Moderator:</u> Gender moderated the impact of group aggression*

		average poverty	waves		into non-victims and victims. 'Victims' = top 10% of those victimised. Assesses change in group status from baseline to follow-up.						
Salmivalli & Isaacs (2005) Finland	212	Middle childhood-adolescence: 11-13 years, 5 & 6 th grade, 50% male, Urban sample, 95% European, ? SES	68	1 year (2x 6 month intervals)	<u>Peer victimisation:</u> Direct, physical, emotional, relational. School based. Current victimisation duration. Frequency measure. Further victimisation	Peer	N	Gender	<i>Individual:</i> Self-perception Perception of peers. <i>Contextual:</i> Peer rejection, Friendlessness,	N	<u>Mediator:</u> Peer rejection at T1 predicts T3 victimisation (1 year later) only when T2 victimisation is taken into account* Peer rejection at T1 predicts victimisation at T3 only when rejection at T2 is taken into account* Self-perception at T1 predicts victimisation at T3, only when victimisation at T2 is taken into account* Self-perception at T1 predicts victimisation at T3 only when rejection at T2 is taken into account*

Salzinger, Ng-Mak, Feldman, Kam & Rosario (2006) USA	611	Middle childhood: 6th grade, ? Gender, urban high risk sample, 65% Hispanic, 53% receive public assistance	91	1 year	<p><u>'Community violence'</u>: Witnessed, direct, indirect violent victimisation. School and community based. Past year. Further victimisation. Frequency measure.</p> <p>Splits outcome into total victimisation exposure which includes direct and indirect victimisation, assesses direct and indirect separately.</p>	Self	N	N	<p><u>Total exposure: Direct and indirect victimisation:</u> <i>Individual:</i> Delinquency*, Parent rated externalising behaviour, Teacher rated externalising behaviour*, Peer rated aggression*, High risk behaviour*, Moral disengagement*.</p> <p><i>Contextual:</i> Delinquent friends*, Negative parenting, Parenting context.</p> <p><i>NB. When witnessed and direct victimisation were assessed as separate outcomes, no differences were found in the significance of the paths reported above for the total model.</i></p>	N	<p><u>Total model: Direct and indirect victimisation:</u> Impact of negative parenting is <i>mediated</i> by delinquent behaviour*, peer delinquency*, teacher rated externalising behaviour*, aggressive*, and peer rated aggression*.</p> <p>The impact of negative parenting was not found to be mediated by risky behaviour or moral disengagement (NS).</p> <p>Parenting context was found to be mediated by negative parenting and the subsequent variables found to mediate the relationship between negative parenting and outcome*.</p>
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											<p>The impact of peer delinquency was moderated by delinquent behaviour*, Teacher rated externalising behaviour*, peer rated aggression*, risky behaviour* and moral disengagement*.</p> <p>The impact of peer delinquency was not found to be moderated by parent rated externalising behaviour (NS).</p>
Sheidow, Gorman-Smith, Tolan & Henry (2001) USA	249	Middle childhood-adolescence: 6th & 8th grade, 100% male, urban high risk, 100% African American & Latino, 'poor'	73	2 years (2 x 1 year intervals)	<u>'Community violence'</u> : witnessed and direct violent victimisation. Community based. Past year. Frequency measure. Further victimisation	Self	N	N	<i>Contextual:</i> Family cluster (exceptional, task oriented, moderately functioning and struggling), Neighbourhood cluster (inner-city with or without functioning social processes, urban communities)	N	<u>Mediator:</u> Interaction between family and neighbourhood cluster*: struggling families in inner-city neighbourhoods with high social organisation report most victimisation.

Smith & Ecob (2007) UK	4,300	Middle childhood: 11-12 years (mean 12 years), ? Gender, community representative sample, ? Ethnicity, ? SES	93 (T4), 89 (T5), 81 (T6)	1, 2, & 4 years (varies within the analysis to assess very short term, short term and long term).	<u>'Crime'</u> : Direct acquisitive and violent victimisation. Unspecified location. Past year. Frequency measure. Further victimisation. Separates outcome according to very short-term effects, short-term and long-term.	Self	Y	Gender, family structure, neighbourhood deprivation, personality, risk taking, weak social bonds	<u>Very short-term, Short-term & long-term:</u> <u>Individual:</u> Offending*	N	N
Snyder, Brooker, Patrick, Snyder, Schrepferman & Stoolmiller (2003) USA	266	Early childhood: 5-6 years (mean 5.5 years), Kindergarten . 50% male, Urban city sample, Majority ethnicity (71 European American), Low-socioeconomic status.	97 had partial data for at least one wave	20 months (4x 7 & 5 month intervals)	<u>Peer victimisation:</u> Direct verbal and physical. School based. Observed current victimisation. Frequency measure. Further victimisation.	Observation	N	N	<u>Individual:</u> Gender	N	N
Stewart, Schreck & Simons (2006) USA	720	Middle childhood-adolescence: 10-13 years (mean 11), 46% male, mixed urban and rural-high risk, 100% African American, mixed SES	85	2 years	<u>Violent victimisation:</u> Direct physical violence. Community based. Past year. Dichotomous. Further victimisation	Self	Y	SES, gender, single parent, parental violence and supervision, school attachment, violent delinquency	<u>Individual:</u> Adopting the street code* <u>Contextual:</u> Violent neighbourhood*, Disadvantaged neighbourhood		<u>Moderating:</u> Tested adopting street code to buffer or increase impact of high crime neighbourhood*, and neighbourhood disadvantage (NS)

Storch, Masia-Warner, Crisp & Klein (2005) USA	144	Adolescents: 13-15 years (mean 13.9), 9th grade, 35% male, urban, 83% Caucasian, middle class. Young people extremely high in social phobia and receiving treatment were excluded	73	1 year	<u>Peer victimisation:</u> Direct, physical and relational, school based. Unspecified duration. Further victimisation. Frequency measure. Separated outcome into overt and relational victimisation for both genders together, and then assessed each gender separately.	Self	Y	Gender	<u>Both genders:</u> <u>Overt and relational victimisation:</u> <i>Individual:</i> Social phobia & anxiety, Social anxiety	N	N
^a Sweeney, Goldner & Richards (2011) USA	175	Middle childhood: 6th grade, ? Gender, urban high risk, 100% African American, low income families	?	1 year & 2 years (2 x 1 year intervals)	<u>'Community violence':</u> Witnessed and direct violent victimisation. Unspecified location. Past year. Frequency measure. Further victimisation Separates outcome according to school grade.	Self	Y	Gender	<u>6th grade variables to predict 7th Grade victimisation:</u> <i>Individual:</i> (Variability in daily feeling states) Dysphoric*, Contented*, (Mean scores) Hostile, Anxious <u>7th grade variables to predict 8th Grade victimisation:</u> <i>Individual:</i> Same as above and below-all non-significant. <u>6th grade variables to predict 8th Grade victimisation:</u> <i>Individual:</i> (Variability in daily feeling states) Dysphoric, Contented, (Mean scores) Hostile*, Anxious*		N

<p>^aGoldner, Peters, Richards & Pearce (2010) USA</p>	<p>233</p>	<p>Middle childhood: 12 years, 6th grade, 41% male, urban high risk, 100% African American, low income families</p>	<p>?</p>	<p>1 year (2 x 1 year intervals)</p>	<p><u>'Community violence'</u>: Witnessed and direct violent victimisation. Unspecified location. Past year. Frequency measure. Further victimisation Outcome separated according to gender and school grade</p>	<p>Self</p>	<p>Y</p>	<p>Gender</p>	<p>^d<u>7th Grade victimisation, Males & Females:</u> <i>Contextual:</i> Time spent with older peers, Time spent with same-sex peers, More time spent in outdoor private space, More time spent in outdoor public space, More time spent in transition between locations. ^d<u>8th Grade victimisation, Males & Females:</u> <i>Contextual:</i> Time spent with older peers*, Time spent with same-sex peers, More time spent in outdoor private space, More time spent in outdoor public space, More time spent in transition between locations.</p>	<p><u>7th Grade victimisation, Males:</u> <i>Contextual:</i> : Time spent with opposite sex peers*, More time spent at home, More time spent with parents, More time spent with extended family, More time spent in school. <u>7th Grade victimisation, Females:</u> <i>Contextual:</i> : Same as above but all non-significant <u>8th Grade victimisation, Males:</u> <i>Contextual:</i> : Same as above but all non-significant <u>8th Grade victimisation, Females:</u> <i>Contextual:</i> : Same as above but all non-significant</p>	<p>N</p>
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										<i>Females:</i> <i>Contextual</i> : Same as above. Only significant finding = More time spent in school*	
Sweeting, Young, West & Der (2006) UK	2,184	Middle childhood: 11 years, 51% male, urban, Majority ethnicity, mixed SES	84	2 years (2 x 2 year intervals)	<u>Peer victimisation:</u> Direct emotional and 'bullying' (no definition). School and 'elsewhere'. Duration not specified but wording suggests current experiences. Dichotomous frequency categories. Further victimisation	Self	Y	N	<i>Individual:</i> Depression*	N	N
Toner & Heaven (2005) Australia	82	Middle childhood: 12-13 years, Year 7, 40% male, semi-rural, mainly Anglo Celtic Australian background	73	2 years	<u>Peer victimisation:</u> (no definition). Further victimisation. Unspecified location. Unspecified duration. Frequency measure.	Self	Y	Gender, T1 attributional variables	<i>Individual:</i> Total generality (for positive and negative events), Locus composite (causal internality and attributions), Loneliness, Gender , Depression	N	N
Wolke, Woods & Samara (2009) UK	335 (Direct victimisation analysis) 234 (Relational victimisation analysis)	Middle childhood: Age 6-7 & 8-9 school year 2 & 4. ? gender ? sample ? ethnicity ? SES	55	2- 4 years	<u>Peer victimisation:</u> Direct physical, verbal and relational. School based. Victimization in previous 6 months. Assesses change in victim status from baseline to follow-up (onset). Dichotomises outcome into non-victims and victims.	Self	N	N	<u>Relational victimisation:</u> <i>Individual:</i> Gender, School year, Special educational needs, Physical health problems, Emotional health problems, Behaviour problems. <i>Contextual:</i> Disliked by peers, Peer hierarchies*, Rejected/ neglected by peers,	<u>Relational and direct victimisation:</u> <i>Contextual</i> : Liked by peers	N

					<p>'Victims'= those who have frequently/ very frequently been victimised.</p> <p>Assesses 'Pure victims' only.</p> <p>Outcome split into relational victim vs. direct victim.</p>				<p>Home living situation,</p> <p><u>Direct victimisation:</u> Assessed same risk factors as above but all non-significant</p>		
Zongkui (2006) China	274	Middle childhood: Mean 9 and 10 years, grades 3 & 4. 52% male, Urban, Majority ethnicity, ? SES	?	2 years	<p><u>Peer victimisation:</u> Direct 'bullying; (no definition). Unspecified location. Unknown duration. Frequency measure. Further victimisation.</p>	Peer	N	'other variables' (not specified)	<p><i>Individual:</i> Emotional loneliness</p>	N	N

* Indicates a significant effect. All variables without a * next to them indicate that no significant effect was found between predictor and outcome.

SES= Socioeconomic Status.

Y= Yes, N= No

? = information was not given by the authors.

'Vict'= Victim.

^aWhere two studies are referenced within the same cell, this indicates that the two studies are based on the same sample; one of which uses the full sample whilst the other uses a sub-sample. These studies have been treated as independent samples in the review.

^bOnly the findings from the SEM analysis of this study are used in this review as this is conducted with the larger sample of participants.

^cThe data from these two studies have been pooled as they are based on the same sample.

^dWhilst outcome was analysed for both genders separately within the original study, findings have been combined in this column for ease of interpretation as no gender differences were found.

NOTE: All of the studies presented in this table were cohort studies. Whilst most of the peer-reported exposure to victimisation did not specify duration of the exposure measured, all of the replies from some of the authors who responded to our request for further clarification of this have stated that it referred to current victimisation. Therefore, it can be implied that all of the studies which use peer-reported victimisation are likely to be measuring current victimisation.

6.4.1.1.1. Population.

All of the included studies were carried out between 1999 and 2011 in mainly ‘westernised’ societies (USA $N = 22$, Canada $N = 5$, Finland $N = 2$, Switzerland $N = 1$, Netherlands $N = 1$, Sweden $N = 1$, UK $N = 3$, Australia $N = 1$), with one from a ‘non-westernised’ society (China $N = 1$). The interval between baseline and follow-up ranged from one year to six and a half years, with participant retention rates between 56%-98%. A total of 26,007–26,348 participants were used (sample size depended on follow-up wave and the outcome and predictors assessed) and studies varied in sample size from 37 participants to 4,300.

Table 36 outlines the characteristics (at baseline) of the populations used in the included studies. This table highlights a number of similarities amongst studies in that the majority used a roughly equal mix of males and females in middle childhood from urban/ sub-urban communities. Very few studies used a participant group comprised mainly of ethnic minority young people. There was also heterogeneity across studies however, in the characteristics of the samples used. Whilst this heterogeneity may make synthesis of the findings more difficult, the advantages of this in terms of the richness of the data should not be ignored. Of note, Table 36 highlights a common lack of reporting by authors on important sample characteristics (e.g., gender, ethnicity).

Table 36

Population Characteristics of Included Studies Assessing Change in the Extent or Likelihood of Extrafamilial Victimization

Characteristic	Number of studies
Age	
• Early childhood <i>(pre-school (kindergarten), aged 0-6)</i>	6
• Middle childhood <i>(junior/ middle school (grades 1-7), aged 7-12)</i>	21
• Adolescence <i>(high school (grades 8-12), aged 13-18)</i>	4
• Middle childhood- adolescence	5
• Early childhood- adolescence	1
Gender	
• Roughly equal male and female	22
• Majority female (>60%)	4
• Majority male (>60%)	1
• All male	1
• Unknown	9
Ethnicity	
• Majority ethnicity	19
• Minority ethnicity	6
• Mixed ethnicity	5
• Unknown	7
Socio-economic status (SES)	
• Low	11
• Middle	4
• Mixed	12
• Unknown	10
Community type	
• Urban/ sub-urban	21 <i>(4 of which were 'high risk')</i>
• Rural/ semi-rural	5
• Mixed	5
• Unknown	6
• Specifically excluded young people with a disability (mental or physical) or special educational needs	5 <i>(1 of which also excluded young people who could not speak English)</i>

6.4.1.1.2. Risk factors.

Individual risk factors could be categorised into six main categories (individual characteristics, internalising difficulties, self-related cognitions, attitudes, externalising difficulties and risky behaviour), within which 30 individual risk factors were assessed. Contextual risk factors could be categorised into six main categories (peer relationships, peer group characteristics, family characteristics, neighbourhood characteristics, environmental context, and different experiences of victimisation), and 26 contextual risk factors were assessed. Many risk factors were only explored in one study.

6.4.1.1.3. Protective factors.

Much less attention was given to protective factors and they were only assessed in 12 studies. However, some of the variables assessed by authors were found to be protective even when this was not hypothesised. Eight individual protective factors were identified which could be grouped into four categories: self-related cognitions, behaviours, attitudes, and internalising. Ten contextual protective factors were also identified which could be grouped into four categories: peer relationships, peer group characteristics, family context, and school context. Only a small amount of protective factors were addressed in more than one study.

6.4.1.1.4. Mediating and moderating variables.

Few studies assessed the interaction between variables. Mediating and moderating variables were assessed in 11 studies in relation to risk factors and three studies in relation to protective factors.

6.4.1.1.5. Definition, measurement, and classification of victims.

Five types of extrafamilial victimisation were assessed within these studies; peer victimisation (including cybervictimisation), violent victimisation, community violence, peer sexual harassment, and ‘crime’. Whilst one study assessed both peer victimisation and community violence (combining the two published studies from the one dataset; Kelly et al., 2008), the remainder assessed just one victimisation type. The definitions, measurement and classifications of victimisation used within these studies are outlined below.

Definition

1. Peer victimisation ($N = 26$) and Cybervictimisation ($N = 1$)

The definition of peer victimisation was inconsistent across studies. In total, 11 studies provided a comprehensive assessment of peer victimisation, including physical, emotional and relational experiences (Barker et al., 2008; Georgiou & Fanti, 2010; Kaltiala-Heino, Frojd, & Marttunen, 2010; Kelly et al., 2008; Kochenderfer-Ladd, 2003; Ladd & Burgess, 1999; Malti et al., 2010; Overbeek, Zeevalkink, Vermulst, & Scholte, 2010; Persson, 2005; Salmivalli & Isaacs, 2005; Wolke, Woods, & Samara, 2009). The remaining 15 assessed; physical and emotional victimisation ($N= 8$) (Boivin et al., 2010; Goldbaum, Craig, Pepler, & Connolly, 2003; Hodges et al., 1999; Hodges & Perry, 1999; Pellegrini & Long, 2002; Romero, 2007; Rulison, Gest, Loken, & Welsh, 2010; Snyder et al., 2003), relational and physical victimisation ($N= 3$) (Geiger, 2003; Martin et al., 2008; Storch, Masia-Warner, Crisp, & Klein, 2005), ‘general’, physical and relational victimisation ($N= 1$) (Bellmore, 2001), and ‘bullying’ and emotional victimisation ($N = 1$) (Sweeting, Young, West & Der, 2006). The final two studies did not provide

a definition of peer victimisation (Toner & Heaven, 2005; Zongkui, 2006). Twenty studies asked about school/ day-care peer victimisation, one study asked about school and ‘elsewhere’, whilst five studies did not specify location.

At follow-up, seven studies assessed ‘current’ victimisation (Bellmore, 2001; Hodges et al., 1999; Hodges & Perry, 1999; Rulison, et al., 2010; Salmivalli & Isaacs, 2005; Snyder et al., 2003; Sweeting et al., 2006) whilst six assessed different time frames including victimisation in the: past five days (Overbeek et al., 2010), past few weeks (Kochenderfer-Ladd, 2003), on-going school term (Kaltiala-Heino, et al., 2010), past two months (Persson, 2005), and past six months (Georgiou & Fanti, 2010; Wolke et al., 2009). Two studies explored a range of time frames as they used a number of different victimisation measures or informants; Pellegrini and Long (2002) measured victimisation over the past 24 hours, one month and one year, whilst Goldbaum et al. (2003) measured victimisation over the past five days and over the school year. The timeframe specified at follow-up was not reported in 11 studies (Barker et al., 2008; Boivin et al., 2010; Geiger, 2003; Ladd & Burgess, 1999; Malti et al., 2010; Martin et al., 2008; Romero, 2007; Schwartz et al., 2005; Storch et al., 2005; Toner & Heaven, 2005; Zongkui, 2006).

A range of measures and informants were used to collect data on peer victimisation. Twelve studies relied on self-report, thus increasing the likelihood of common method variance (Georgiou & Fanti, 2010; Goldbaum et al., 2003; Kalitala-Heino, et al., 2010; Kochenderfer-Ladd, 2003; Ladd & Burgess, 1999; Martin et al., 2008; Overbeek et al., 2010; Romero, 2007; Storch et al., 2005; Sweeting et al., 2006; Toner & Heaven, 2005; Wolke et al., 2009). Eight studies used peer report (Bellmore, 2001; Boivin et al., 2010; Hodges et al., 1999; Geiger,

2003; Hodges & Perry, 1999; Rulison et al., 2010; Salmivalli & Isaacs, 2005; Zongkui, 2006), two used researcher observation (Persson, 2005; Snyder et al., 2003), and more than one informant was used in four studies (Barker et al., 2008; Malti et al., 2010; Pelligrini & Long, 2002; Schwartz et al., 2005).

Cappadocia (2009) assessed cybervictimisation which encompassed being 'bullied' (no definition given) through the internet or mobile phone within the last two months at follow-up. Victimization in this study was self-reported.

2. Violent victimisation ($N = 2$) and 'community violence' ($N = 7$)

The main difference between the assessment of violent victimisation and community violence is the specification of location. Many similarities were found between these two forms of victimisation and they were therefore considered together in this review. The definition used to measure exposure to violence varied across studies. Only one study assessed witnessed, direct and 'heard about' violence (Maldonado-Molina, Jennings, Tobler, Piquero, & Canino, 2010), whilst five studies included both witnessed and direct violence (Goldner et al., 2010; Mrug & Windle, 2009; Salzinger, Ng-Mak, Feldman, Kam, & Rosario, 2006; Sheidow, Gorman-Smith, Tolan, & Henry, 2001; Sweeney et al., 2011). The remaining three studies assessed: direct violence only (Kelly et al., 2008; Stewart, Schreck, & Simons, 2006), or witnessed violence only (Farrell & Sullivan 2004). Five of these studies specified violence in the community (Kelly et al., 2008; Maldonado-Molina et al., 2010; Mrug & Windle, 2009; Sheidow et al., 2001; Stewart et al., 2006), one study referred to school- and community-based violence (Salzinger et al., 2006), and three studies failed to specify location (Farrell & Sullivan, 2004; Sweeney et al., 2011; Goldner et al., 2010).

The duration of violence exposure asked about at follow-up was largely consistent across studies, with eight studies asking about violence within the past year and one asking about lifetime violence exposure (Farrell & Sullivan, 2004). All studies used self-report only and therefore increase the likelihood of common method variance.

3. Peer sexual harassment ($N = 1$)

The one study assessing peer sexual harassment (Greenwald, 2004) focussed on a range of experiences from the least intrusive (non-physical) to the most intrusive (physical) forms. Location of victimisation was unspecified. Duration of victimisation experiences assessed at follow-up covered the past year and the young person self-reported victimisation.

4. 'Crime' ($N = 1$)

One study focussed on victimisation by direct acquisitive and violent 'crime' (Smith & Ecob, 2007). Location of victimisation was unspecified and experiences within the past year were assessed at follow-up using self-report only.

Measures

A number of procedures and measures were used to collect information on victimisation, some of which had been developed and standardised in earlier research and some were newly developed for the study. Questionnaires (self-report, parent, peer or teacher report) were used in 22 studies. Fifteen of these used previously designed questionnaires (adapted or original versions) and seven studies developed new questionnaires. Interviews were conducted in six studies: three previously designed and three newly developed. Peer nomination procedures were used in five studies: two which followed a standardised format and three which were

new. Researcher observation was used in two studies: one following a standardised procedure and one newly developed.

Classification of victims

The vast majority of studies ($N = 29$) assigned a continuous victimisation score to assess and classify victimisation, whilst one study assessed community victimisation using an ordinal categorical classification system (Mrug & Windle, 2009). Cappadocia (2009) used the presence or absence (yes/no) of victimisation to classify 'cybervictims' and the classification of victims within the main analysis of the study by Sweeting, Young, West, and Der (2006) was dichotomised based on the presence or absence of any of four victimisation experiences. In contrast, the study assessing peer sexual harassment (Greenwald, 2004) dichotomised non-victims as those who had never, or 'almost never', experienced peer sexual harassment (PSH), and victims as those who, on average, suffered PSH more than 'almost never' at follow-up. Three studies assessing peer victimisation used a dichotomous classification system whereby only those young people who had experienced the most extreme (Rulison et al., 2010), the most frequent (Kaltiala-Heino et al., 2010), or the most extreme and frequent victimisation experiences (Goldbaum et al. (2003) were classified as victims at follow-up. These five studies therefore included 'low-level' victimisation in the non-victim groups.

Overall, there was variation in the way in which victimisation was defined, assessed, and classified within the 37 studies identified. This is likely to have an impact on the outcome, depth and consistency of the findings reported, and as a result, the conclusions of this review.

6.4.2. Risk of bias in included studies.

All 37 studies contained a varying amount of bias. Figure 7 presents a graph illustrating the overall risk of bias and confounding *across* studies, while Figure 8 demonstrates the risk of bias and confounding identified *within* each study. No study was rated as being at low risk of bias in all of the seven areas assessed. Based on a possible score of 0-14, 14 indicating the highest risk of bias, studies scored between 4 and 12 and received an average rating of 6.8.

6.4.2.1. Population bias.

Risk of population bias varied across studies. Studies classified as low risk ($N = 7$, 19%) appeared to use a representative sample and detailed a clear and seemingly unbiased recruitment process. Those deemed as having an unclear risk of population bias ($N = 19$, 51%) were classified this way due to: limited sample information, unknown sample characteristics following attrition, population formed a sub-sample of an original cohort (no details on sub- sample), unclear selection procedure, and/or the characteristics of the sample suggests they may not be representative of the target population. Finally, the studies classified as having a high risk of population bias ($N = 11$, 30%) used specific groups of young people (not specified within the aims of the study) which would not be representative of the target population.

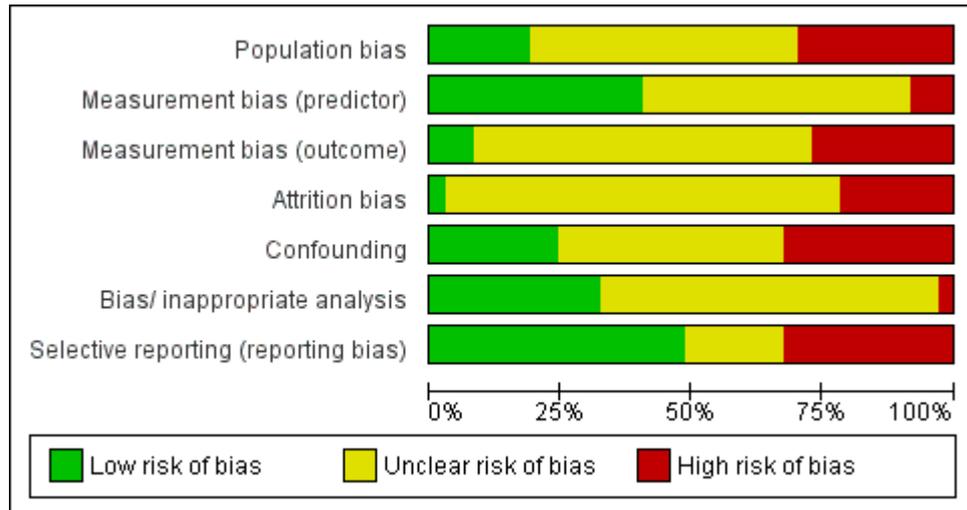


Figure 7. Risk of bias across the 37 included studies.

6.4.2.2. Measurement bias (predictor)

Predictor measurement bias was found to be low in 41% of studies ($N = 15$) as the measures used to test the predictors were standardised and the authors tested reliability on their sample. Of the 51% studies ($N = 19$) deemed as having an unclear risk of bias, this was due to limited testing of new measures, mixed testing and poor reliability of measures where more than one measure was used, and/or methodological differences across participants. Only three studies were deemed as being at high risk of predictor measurement bias (8%) due to the use of new measures which received no testing for reliability and/or validity, or use of previously designed measures which had not been tested or standardised or were found to have questionable/poor reliability.

	Population bias	Measurement bias (predictor)	Measurement bias (outcome)	Attrition bias	Confounding	Bias/inappropriate analysis	Selective reporting (reporting bias)
Barker 2008	+	?	?	?	-	?	+
Bellmore 2001	?	?	-	-	-	+	-
Boivin 2010	?	?	?	?	-	?	+
Cappadocia 2009	?	?	-	?	?	?	+
Farrell 2004	?	+	+	-	?	?	-
Geiger 2003	-	+	?	-	?	?	-
Georgiou 2010	?	+	?	-	?	?	+
Goldbaum 2003	-	+	-	?	?	?	?
Goldner 2011	?	?	?	?	?	?	?
Greenwald 2004	-	+	+	?	?	?	+
Hodges 1999	?	+	?	?	+	?	?
Hodges 1999a	-	?	?	?	+	?	?
Kaltiala-Heino 2010	?	?	-	-	?	?	-
Kelly 2008	-	?	?	?	-	+	+
Kochenderfer-Ladd 2003	?	+	?	?	?	?	?
Ladd 1999	?	+	?	?	-	+	-
Maldonado-Molina 2010	+	?	?	?	-	?	-
Malti 2010	+	?	+	?	-	?	+
Martin 2008	-	+	?	?	+	+	+
Mrug 2009	+	-	?	?	+	+	+
Overbeek 2010	?	+	?	-	-	+	?
Pellegrini 2002	-	?	?	?	-	+	+
Persson 2005	?	?	?	?	?	?	?
Romero 2007	-	+	?	?	+	?	-
Rulison 2010	?	?	-	?	+	+	+
Salmivalli 2005	+	?	?	-	?	?	+
Salzinger 2006	?	-	?	?	-	?	-
Sheidow 2001	?	?	?	?	-	?	+
Smith 2007	+	?	-	?	+	+	+
Snyder 2003	?	+	?	+	?	+	-
Stewart 2006	+	?	-	?	+	+	+
Storch 2005	-	+	?	?	?	?	+
Sweeney 2011	?	?	?	?	?	?	-
Sweeting 2006	?	?	-	?	?	+	+
Toner 2005	-	+	?	?	+	-	-
Wolke 2009	?	-	-	-	-	?	-
Zongkui 2006	-	+	-	?	?	?	+

Figure 8. Risk of bias within each of the 37 included studies.

6.4.2.3. Measurement bias (outcome)

Figure 7 indicates that the majority of studies were classified as having an unclear or high risk of outcome measurement bias. Those deemed as having a high risk of bias ($N = 10$; 27%) had problems in more than one area of the following: no testing of the measure used or testing suggests the measure to have poor reliability, only one informant was used, no information was given on the methodology used, issues with the classification of 'victims' (only based on extreme victimisation in some cases), non-specific questions being asked (e.g., have you been 'bullied'), and/or poor or no definition of victimisation. Studies which had an unclear risk of bias ($N = 24$, 65%) had issues in one or more of the following areas: little information on methodology, some questionable findings on the reliability of the measure used, some changes in the methodology used to assess victimisation over time, only one informant used, and/or the use of a narrow definition of victimisation. The three studies which were classed as low risk of bias in the measurement of outcome (8%) used a reliable, valid and comprehensive measure of victimisation.

The findings appear to indicate that outcome measurement bias was more problematic than predictor measurement bias. However, it should be noted that the measurement of outcome (i.e., victimisation) was scrutinised by the author of this review in more detail than the predictor measurement bias due to its importance for the findings, conclusion and utility of the study. The number of predictors measured within many studies would also have made it difficult to accurately and concisely synthesise predictor measurement bias in as much detail.

6.4.2.4. Attrition

An attrition rate of 20% has been deemed acceptable for longitudinal studies (i.e. an 80% retention rate; Desmond, Maddux, Johnson, & Confer, 1995; Fischer, Dornelas, & Goethe, 2001) and an attrition rate of < 20% was therefore classed as ‘good’ within this review. An attrition rate of between 21-30% was deemed ‘acceptable’, and >30% as ‘poor’.

There was a high risk of attrition bias in 22% studies ($N = 8$), an unclear risk in 76% ($N = 28$), and a low risk in only 3% of studies ($N = 1$). Where attrition bias was rated as high risk, this was due to high drop-out rates and/or significant differences between retained and lost participants. Whilst many of the studies deemed as having an unclear risk of attrition bias maintained very good retention rates, they often failed to carry out any, or limited, testing for reported differences between retained and lost participants. Control over missing data was also seldom reported. Others ($N = 4$) failed to report attrition rates.

6.4.2.5. Reporting bias

Reporting bias did not appear to be a problem in 49% of studies ($N = 18$), yet there was an unclear risk of reporting bias in 19% studies ($N = 7$) due to lack of reporting on some ‘non-significant’ findings. A high risk of reporting bias was identified in 32% of studies ($N = 12$) due to an absence of data for all non-significant findings, missing data on some of the models tested, and/or an absence of findings to match the aims of the study/analysis.

6.4.2.6. Error/ bias in analysis

When using parametric tests to assess the impact of one variable on another, a number of important assumptions should be met. This includes ensuring the

normality of the data, sample size, multicollinearity and shared error, are met. If these assumptions are violated, transformation of the data should take place or non-parametric equivalents should be considered.

Of the studies included in this review, 32% ($N = 12$) were rated as having a low risk of bias or error in their analysis as the authors tested and transformed their data and adjusted the statistical tests used where necessary. For 65% of articles ($N = 24$), it was unclear whether appropriate statistical tests were carried out as testing of the use of parametric statistics was not reported. The remaining study (3%) was deemed as having a high risk of bias/error in their statistical analysis as they did not report testing or transforming their data, despite acknowledging the presence of multicollinearity.

Common method variance, where the same informant has been used on all measures of the study (e.g. self-report on all risk/protective factors and outcome), has been suggested to be at risk of inflating effect size (Spector, 2006). There was common method variance in 21 studies (57%) within this review.

6.4.2.7. Confounding

Controlling for the impact of confounding variables on outcome may improve the reliability of findings. However, knowing which variables to control for is subjective and infinite. As a minimum, the author of this review expected gender to be controlled for as males and females are perceived to face different risks and pressures outside of the family. However, there are other important influences such as age, background/family characteristics etc., which should be considered where possible. The potential impact of confounding variables was high in 32% of studies ($N = 12$) as no control over any potential confounding factors was reported. In

contrast, 24% of studies ($N = 9$) were deemed as being at low risk as they controlled for gender and a number of other factors within their analysis. A final 43% of included studies ($N = 16$) were said to face an unclear risk of bias from confounding variables as they controlled for gender but no other variables

6.4.3. Risk factors for extrafamilial victimisation

The risk factors identified within the included studies can be separated into two groups: individual and contextual risk factors. All risk factors were assessed for their ability to predict extrafamilial victimisation at follow-up after controlling for levels of extrafamilial victimisation at baseline. Table 37 outlines the significant and non-significant findings for each risk factor along with the significant mediating and moderating variables found.

6.4.3.1. Individual risk factors.

Almost all ($N = 31$) of the included studies assessed the impact of individual risk factors on extrafamilial victimisation, falling within six categories; individual characteristics (static and dynamic), internalising difficulties, self-related cognitions, attitudes, externalising difficulties, and risky behaviour. These findings are presented in table 37 and summarised below.

Table 37. Significant and non-significant risk factors for extrafamilial victimisation as reported in the studies included in this review.

Risk factor	Number of studies finding a significant positive relationship between predictor and outcome	Number of studies finding a non-significant relationship between predictor and outcome	Relationship significantly mediated or moderated by another variable
<i>Individual risk factors</i>			
1. Individual characteristics			
<i>Static</i>			
Age/ grade	<p><i>Sexual harassment (1)</i></p> <p>-Greenwald (2004): significant increase in the percentage of young people victimised from 6th grade to 7th and 8th grade.</p>	<p><i>Peer victimisation (2)</i></p> <p>-Pellegrini and Long (2002): steady decline in victimisation from 5th grade to the beginning of 7th grade, when victimisation increased slightly.</p> <p>- Wolke et al. (2009): no age impact on the onset of relational or direct peer victimisation.</p> <p><i>Violence exposure (1)</i></p> <p>- Maldonado-Molina, Jennings, Tobler,</p>	

		Piquero, and Canino (2010): not related to changes in community violence exposure	
Gender	<p><i>Peer victimisation (4)</i></p> <p>-Where physical and emotional/verbal victimisation was assessed, (Boivin et al., 2010; Pellegrini & Long, 2002), when victimisation was defined as ‘picked on’ and ‘hit/pushed’ Rulison, Gest, Loken, and Welsh (2010), and when physical victimisation was assessed Geiger (2003), findings suggest males may be more at risk.</p> <p><i>Violence exposure (1)</i></p> <p>- Farrell and Sullivan (2004): Greater increases in witnessing violence for males</p> <p><i>Peer sexual harassment (1)</i></p> <p>- Greenwald (2004): Greater risk for females than males</p>	<p><i>Peer victimisation (9)</i></p> <p>-Where a comprehensive assessment of peer victimisation was used (direct relational, physical and emotional), no gender differences were found (Barker et al., 2008; Georgiou & Fanti, 2010; Kochenderfer-Ladd, 2003; Wolke, Bloomfield, & Karstadt, 2000)</p> <p>- Relational victimisation was not found to be effected by gender (Geiger, 2003; Wolke et al., 2009).</p> <p>- Emotional and physical peer victimisation were not found to be influenced by gender Snyder et al., (2003) or Wolke et al. (2009).</p> <p>- Toner and Heaven (2005) also reported no significant gender differences (no</p>	

	<p><i>Cyber victimisation (1)</i></p> <p>- Cappadocia (2009): females more at risk than males</p>	<p>definition of peer victimisation).</p> <p><i>Violence exposure (1)</i></p> <p>-When assessing witnessed, direct and 'heard about' community violence exposure, no significant gender effects (Maldonado-Molina et al., 2010)</p>	
Special educational needs		<p><i>Peer victimisation (1)</i></p> <p>-Wolke et al. (2009): not a predictor of relational or direct (physical and emotional) peer victimisation</p>	
<i>Dynamic</i>			
Physical strength	<p><i>Physical victimisation (emotional and physical) (2)</i></p> <p>- Hodges and Perry (1999): inverse relationship.</p> <p>-Romero (2007): positive relationship (directed same-school peer victimisation) for boys only, and inverse indirect relationship</p>		<p><i>Moderation effects:</i></p> <p>Both studies identified peer relationships (and gender) as significant moderating variables; as peer rejection increased, the negative relationship between</p>

	with received same-school peer victimisation).		<p>physical strength and victimisation became stronger (Hodges & Perry, 1999).</p> <p><i>Mediation effects:</i></p> <p>- Romero (2007): Maintenance of a best friend, peer rejection, reciprocal friends' aggression (for males), having friends who were low in internalising problems (for females), and low levels of perceived social competence (for females) mediated the relationship between physical strength and peer-</p>
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			reported, self-reported, or received same-school peer victimisation.
Academic functioning		<i>Peer victimisation (1)</i> -Kelly et al. (2008): did not predict change in direct (physical and emotional) peer victimisation	
Physical health problems		<i>Peer victimisation (1)</i> -Wolke et al. (2009): did not predict onset of direct (physical and emotional) or relational peer victimisation	
Frequency of internet use		<i>Cyber victimisation (1)</i> -Cappadocia (2009): did not predict onset of victimisation	
2. Internalising difficulties			
Internalising	<i>Physical and emotional peer victimisation (5)</i> Significantly predicted by:	<i>Peer victimisation (2)</i> -Barker et al. (2008): internalising	<i>Moderating variables:</i> Hodges & Perry, (1999):

<p>problems/ symptoms</p>	<p>-‘Internalising problems/ symptoms’ defined as: withdrawal, anxiety-depression and hovering peer-entry style (e.g., watches other children playing but doesn’t join in) (Hodges & Perry, 1999), anxiety, solitary work, fearfulness and sadness (Hodges et al., 1999), fear and happiness/sadness (self-reported victimisation only) (Romero, 2007) -‘emotional vulnerability/ symptoms’ defined as: feelings get hurt easily and usually sad (Boivin, et al., 2010), unhappy, depressed, tearful etc., (also assessed relational victimisation, $r= 0.16$) (Malti et al., 2010).</p>	<p>symptoms (mood, anxiety and happiness) did not predict growth in peer victimisation (physical, emotional and relational) for any of the peer victimisation trajectory comparisons (low, moderate, high victimisation trajectories; OR 0.78, 95% CI 0.59- 1.05; OR 0.88, 95% CI 0.62- 1.26; OR 0.89, 95% CI 0.76- 1.04) - Romero (2007): internalising problems (fear and happiness/sadness) did not predict peer victimisation (physical and emotional) measured as peer-reported, ‘directed’ same-school, or ‘received’ same-school victimisation.</p>	<p>influential impact of peer relationships on outcome; peer rejection led to a stronger relationship between internalising problems and peer victimisation; friendships characterised by high protection eliminated the impact whilst those low in protection exacerbated it.</p>
<p>Anxiety and somatic symptoms</p>	<p><i>Physical and verbal peer victimisation (1)</i> - Goldbaum et al. (2003): Anxiety and somatisation (no data was reported) were significant risk factors.</p>	<p><i>Physical or relational peer victimisation (1)</i> -Storch et al. (2005): Social anxiety (alone), nor social anxiety and phobia</p>	<p><i>Mediating variables:</i> -Sweeney et al. (2011): Duration of follow-up.</p>

	<p><i>Violence exposure (witnessed and direct) (1)</i> Sweeney et al. (2011): Mean levels of anxious feelings in the 6th grade predicted victimisation two years, but not one year, later.</p> <p><i>Cyber victimisation (1)</i> -Cappadocia, (2009): Mean levels of anxious and somatic symptoms (grouped variable) were risk factors for females only.</p>	(grouped variable), at baseline was significant predictors.	<i>Moderating variables:</i> Cappadocia, (2009): Gender.
Emotional (psychosomatic) health problems		<p><i>Peer victimisation (1)</i> -Wolke et al. (2009): The presence of at least one emotional (psychosomatic) health problem (e.g., bedwetting, nightmares, poor appetite) at baseline did not predict the onset of relational (OR 1.81, 95% CI 0.97- 3.36), nor direct (physical and emotional) peer victimisation.</p>	
Depressive	<i>Peer victimisation (2)</i>	<i>Peer victimisation (2)</i>	<i>Mediating effects:</i>

symptoms	<p>-Sweeting et al. (2006): positive relationship between depression at age 11 and peer victimisation (emotional and ‘bullying’) aged 13.</p> <p>- Kaltiala-Heino et al. (2010): significant positive relationship between depression at age 15 and peer victimisation (relational, physical and emotional) at age 17 (females only; OR 4.4, 95% CI 1.0–19.0).</p> <p><i>Cyber victimisation (1)</i></p> <p>Cappadocia (2009): Depressive symptoms at grade 9 predicted ‘onset’ of cybervictimisation at grade 10.</p>	<p>-Kelly et al. (2008) (study merged with Schwartz et al., 2005): non-significant relationship with peer victimisation (relational, physical and emotional) at one-year follow-up.</p> <p>- Toner and Heaven (2005): non-significant relationship (no definition of peer victimisation) at two-year follow-up</p>	<p>Kaltiala-Heino et al. (2010): when socio-demographic variables (age, parental education and family structure) were controlled for no significant relationship was found (OR 4.1, 95% CI 0.9–17.7).</p> <p><i>Moderating effect:</i></p> <p>Kaltiala-Heino et al. (2010): Non-significant predictor for males.</p>
Withdrawal/ asocial behaviour	<p><i>Physical and relational peer victimisation (2)</i></p> <p>-Boivin et al. (2010): Significant predictor one year later in all three stages of the research</p> <p>-Goldbaum et al. (2003): Significant predictor of peer victimisation.</p>	<p><i>Physical, relational and emotional peer victimisation (1)</i></p> <p>-Kochenderfer-Ladd (2003): did not predict peer victimisation.</p>	

<p>Daily feeling states</p>	<p><i>Witnessed and direct violence exposure (1)</i> -Sweeney et al. (2011): Less variability in feeling content and feeling dysphoric (separately) predicted an increase in violence exposure in the short-term (grade 6 to 7) but not longer term (grade 6 to 8). Relationship was attributed to the way the variability was displaced in the regression equation (for feeling content) as it was non-significant when examined separately. Higher mean levels of hostile feelings in grade 6 significantly predicted increased violence exposure in the long term (8th grade when 7th grade exposure to violence was controlled), but not short-term (7th grade). None of these daily feeling states in grade 7 predicted violence exposure in grade 8.</p>		<p><i>Mediating variables:</i> Sweeney et al. (2011): Duration of follow-up.</p> <p><i>Moderating variables:</i> Sweeney et al. (2011): Age</p>
<p>Loneliness</p>		<p><i>Peer victimisation (no definition) (2)</i> -Not found to predict peer victimisation:</p>	

		(Toner & Heaven, 2005) (Zongkui et al., 2006)	
3. Self-related cognitions			
Self-perception	<p><i>Peer victimisation (1)</i></p> <p>-Salmivalli and Isaacs (2005): significant indirect (but not direct) relationship with peer victimisation.</p>		<p><i>Mediation effects:</i></p> <p>-Salmivalli and Isaacs (2005): lower self-perception scores at baseline significantly increased peer victimisation and peer rejection at 6 month follow-up, which increased peer victimisation at 1 year follow-up.</p>
Meta-perception accuracy	<p><i>Physical and relational peer victimisation (1):</i></p> <p>-Bellmore (2001): the accurate knowledge of how well liked or disliked young people are by</p>		

	their friends predicted increase in peer victimisation from 6 th to 7 th , but not 7 th to 8 th , grade.		
Generality		<i>Peer victimisation (1)</i> - Toner and Heaven (2005): ‘Generality’ (making stable and global attributions for negative and positive events) did not predict peer victimisation (no definition).	
Locus composite		<i>Peer victimisation (1)</i> - Toner and Heaven (2005): ‘locus composite’ (internal or external attributions for positive and negative outcomes) did not predict peer victimisation (no definition).	
4. Attitudinal variables			
Moral disengage	<i>Direct and indirect violence exposure (1)</i> -Salzinger, Ng-Mak, Feldman, Kam, and		

ment	Rosario (2006): Moral disengagement (the extent to which aggression or attribution of blame is justified under certain circumstances) increased risk of exposure over one-year for direct and witnessed community victimisation, separately and combined.		
Attitudes supporting violence	<i>Witnessing violence (1)</i> -Farrell and Sullivan (2004): high levels of attitudes supporting violence predicted increases in violence exposure.		
5. Externalising difficulties			
Externalising problems/problem behaviours	<i>Peer victimisation (1)</i> -Hodges et al. (1999) ‘externalising problems’ (fighting, bullying others, aggression, lying and stealing) predicted physical and emotional peer victimisation.	<i>Relational or direct (physical and emotional) peer victimisation (2)</i> - Externalising problems (aggression, argumentativeness, dishonesty, pushy peer entry style, disruptiveness and pro-social behaviour) Hodges and Perry (1999) and	<i>Mediating variable:</i> Salzinger et al. (2006): Informant of externalising problem behaviour; relationship did not reach significance for parent-

	<p><i>Direct and indirect violence exposure (1)</i></p> <p>Salzinger et al. (2006): Teacher-rated externalising problem behaviour (not defined) predicted both outcomes combined and individually, one-year later.</p>	<p>behaviour problems (conduct problems, hyperactivity, emotional symptoms and peer problems) Wolke et al. (2009) did not predict peer victimisation.</p>	<p>rated externalising problem behaviour.</p>
Aggression	<p><i>Physical and emotional peer victimisation (6)</i></p> <p>-Kochenderfer-Ladd, (2003): Self-, teacher-, and mother-reported aggression predicted increased peer victimisation (including relational victimisation). Teacher-reported aggression predicted peer victimisation from 1st to 2nd grade for females only.</p> <p>-Malti et al. (2010): teacher-reported aggression (only) was related to increased victimisation ($r= 0.26, p< 0.01$).</p> <p>-Rulison et al. (2010): Peer-reported aggression in 3rd-5th grade predicted peer victimisation in 7th-9th grade.</p> <p>-Romero (2007): self-reported aggression at</p>	<p><i>Peer victimisation (3)</i></p> <p>-Boivin et al. (2010): peer-reported aggression did not predict physical and emotional peer victimisation one year later in any stage (3 waves)</p> <p>- Romero (2007): peer-reported aggression did not predict peer victimisation.</p> <p>-Geiger (2003) children high in physical and relational aggression remained high in physical peer victimisation (no change from T1 to T2).</p> <p><i>Violence exposure (1)</i></p> <p>Farrell and Sullivan (2004): self-report</p>	<p><i>Moderating effects:</i></p> <p>-Romero (2007): Relationship was exacerbated by friends' level of internalising problems (further moderated by gender), and friends who were medium/low in victimisation or medium/low in physical strength (for males only).</p> <p>-Kochenderfer-Ladd, (2003): Gender.</p>

	<p>grade 8 predicted self-reported peer victimisation one year later.</p> <ul style="list-style-type: none"> - Goldbaum et al. (2003): self-reported aggression at baseline (6-7th grade) predicted peer victimisation one year later. - Barker et al. (2008): physical aggression when 17 months old predicted high/chronic peer victimisation (physical, emotional and relational) and moderate/ increasing trajectories from preschool compared to low/increasing victimisation trajectories (OR 0.73, 95% CI 0.56- 0.97 and OR 0.76, 95% CI 0.66- 0.87, respectively). No difference found between moderate/ increasing in victimisation and high/chronic victimisation trajectories (OR 0.97, 95% CI 0.71- 1.32). <p><i>Violence exposure (1)</i></p> <ul style="list-style-type: none"> -Salzinger et al. (2006): positive relationship 	<p>aggression did not found predict increased witnessing violence.</p>	<p><i>Mediation effects:</i></p> <ul style="list-style-type: none"> -Romero (2007), indirect effects between self-reported aggression and direct same-school victimisation when young people were low and medium in peer rejection (significant inverse relationship).
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	between peer-reported aggression and direct and indirect community violence exposure.		
Bullying behaviour	<i>Physical and emotional peer victimisation (1)</i> - Goldbaum et al. (2003): bullying behaviour at baseline (6-7 th grade) predicted peer victimisation one year later.		
Delinquency/ offending	<i>Violence exposure (3)</i> - positive relationship with acquisitive and violent 'crime' at one and two year follow-up, negative relationship at four-year follow-up (Salzinger et al., 2006; Smith & Ecob, 2007). - Farrell and Sullivan (2004): significant positive relationship with witnessing violence at four-year follow-up.		<i>Moderating variable:</i> Duration of study's follow-up.
'Adopting the street code'	<i>Violence exposure (1)</i> -Stewart et al. (2006): Adopting the street code (maintaining the respect of others through violent identity, toughness, and exacting retribution when one is disrespected) predicted		

	increased community violence exposure.		
Hyperactivity		<p><i>Peer victimisation (1)</i></p> <p>- Barker et al. (2008): hyperactivity did not predict any peer victimisation (physical, emotional, relational) trajectory (OR 0.93, 95% CI 0.77-1.14; OR 0.96, 95% CI 0.76-1.16; OR 0.99, 95% CI 0.93- 1.06).</p>	
6. Risky behaviour			
High risk behaviour/ alcohol and drug use	<p><i>Violence exposure (2)</i></p> <p>-Mrug and Windle (2009): alcohol predicted direct exposure to community violence at one-year follow-up.</p> <p>- Salzinger et al. (2006): When assessed as part of a ‘high risk behaviour’ variable (tobacco use, alcohol/drug use and sexual activity), there was a positive relationship with direct and/or witnessed community violence exposure one-year later .</p>	<p><i>Violence exposure (2)</i></p> <p>Alcohol or drug use before the age of 11 did not predict exposure to witnessed violence at 16 month (Mrug & Windle, 2009) or four-year follow-up (Farrell & Sullivan, 2004).</p>	<p><i>Meditating variable:</i></p> <p>-Mrug and Windle (2009): Duration of follow-up.</p> <p>-Whether the predictor was a single/ grouped variable.</p>

Thrill and adventure seeking/ sensation seeking		<i>Violence exposure (1)</i> -Maldonado-Molina et al. (2010): did not predict witnessed, direct or heard about community violence exposure.	
<i>Contextual risk factors</i>			
1. Peer relationships			
Peer rejection	<p><i>Physical and emotional peer victimisation (2)</i></p> <p>-At one-year follow-up, Hodges and Perry (1999) reported a positive relationship, as did Romero (2007) (peer and self-report peer victimisation for males only).</p> <p>- Salmivalli and Isaacs (2005): indirect relationship with physical, emotional and relational peer victimisation.</p> <p><i>Violence exposure (1)</i></p>	<p><i>Peer victimisation (3)</i></p> <p>Did not predict:</p> <p>- change in physical or relational peer victimisation (Geiger, 2003), the onset of relational or direct (physical and emotional) peer victimisation (Wolke et al. (2009), or the risk of physical and emotional peer victimisation assessed in different ways (directed same-school or received same-school victimisation) (Romero, 2007).</p>	<p><i>Mediating variable:</i></p> <p>-Salmivalli and Isaacs (2005): peer victimisation and peer rejection at six months increased risk of peer victimisation (physical, emotional and relational) at one year.</p>

	-Kelly et al. (2008): positive relationship with direct community victimisation.		
Friendlessnes ss/ alienation	<i>Peer victimisation (2)</i> Friendlessness and peer acceptance (Geiger, 2003), and alienation (Goldbaum et al., 2003) predicted physical and relational peer victimisation, relational victimisation, and physical and emotional peer victimisation.	<i>Peer victimisation (2)</i> -Wolke et al. (2009): being disliked by peers did not predict physical and emotional, or relational (OR 0.93, 95% CI 0.87- 1.01), peer victimisation. -Salmivalli and Isaacs (2005): no significant relationship between friendlessness and peer victimisation (physical, emotional and relational) at one-year follow up.	
Peer hierarchies	<i>Peer victimisation (1)</i> Wolke et al. (2009): pupils from classes with high levels of peer hierarchical structuring at baseline) were significantly more likely to become a victim of relational peer victimisation 2 and 4 years later (OR 2.00, 95% CI 1.08- 3.70) but not direct (physical		<i>Mediating variable:</i> Wolke et al. (2009): Type of victimisation assessed.

	and emotional) victimisation.		
Neglected and controversial peer group status		<p><i>Peer victimisation (1)</i></p> <p>-Geiger (2003): Neither neglected peer group status (children who were low in peer acceptance and peer rejection), nor controversial peer group status (children who were high in peer acceptance and peer rejection) predicted change in physical or relational peer victimisation. Those higher in controversial peer group status scores at baseline (compared to children with a non-controversial peer group status) started off higher in relational peer victimisation but experienced a significant decrease over time.</p>	
Perception of peers		<p><i>Peer victimisation (1)</i></p> <p>(Salmivalli & Isaacs, 2005): Perception of peers did not directly or indirectly predict physical, emotional and relational peer</p>	

		victimisation.	
2. Peer group characteristics			
Peer delinquency	<p><i>Violence exposure (2)</i></p> <p>-Salzinger et al. (2006): direct and indirect positive relationship with exposure to direct and witnessed violence over time (assessed together and separately).</p>		<p><i>Partial mediation effects:</i></p> <p>Salzinger et al. (2006): peer delinquency had a positive relationship with the young person's delinquent behaviour, teacher-rated externalising behaviour, peer-reported aggression, risky behaviour, and moral disengagement, which all had a positive relationship with violence exposure.</p>
Peer group aggression	<p><i>Peer victimisation (2)</i></p> <p>-Positive relationship between peer-group aggression and emotional and physical peer victimisation (Rulison et al., 2010) and</p>	<p><i>Peer victimisation (2)</i></p> <p>-No relationship between peer-group aggression and peer or self-reported peer victimisation by (Romero, 2007).</p>	<p><i>Moderating variables:</i></p> <p>Rulison et al. (2010) gender; positive relationship between</p>

	Romero (2007; received same-school victimisation only).	-Changes in peer-group aggression from past and current levels were unrelated to changes in peer victimisation (Rulison et al., 2010).	<p>predictor and outcome for females, negative relationship for males.</p> <p><i>Mediating variables:</i></p> <p>-Romero (2007): when assessing direct same-school victimisation as the outcome, this was indirectly predicted by peer aggression with a significant negative relationship for males.</p>
Friends' level of internalising problems	<p><i>Peer victimisation (1)</i></p> <p>-Romero (2007): When gender was taken into account there was a significant positive relationship between friends' levels of internalising problems at grade 8 and 'directed' same-school peer victimisation</p>		<p><i>Mediating effects:</i></p> <p>Type of peer victimisation assessed; no relationship between received same-school, self-report or peer-report victimisation.</p>

	(physical and emotional) one-year later for males only.		<i>Moderating effects:</i> Gender
Friends' physical strength	<i>Peer victimisation (1)</i> -Romero (2007): Friends' level of physical strength at 8 th grade was found to have a significant positive relationship with received same-school peer victimisation (physical and emotional) at one year follow up.		<i>Mediating effect:</i> Romero (2007): Type of peer victimisation assessed (received same-school peer victimisation versus peer and self-report, and 'directed' same-school peer victimisation)
Older peers		<i>Violence exposure (1)</i> -Goldner et al. (2010): More time spent with older peers in 7 th grade increased exposure to community violence (witnessed and direct) for males and females in the 8 th grade (short-term), but not from 6 th grade to 7 th grade (longer-term)	<i>Moderating effect:</i> Age and/or duration of follow-up

Friend's level of victimisation		<i>Peer victimisation (1)</i> -Romero, (2007): not a predictor of peer victimisation (physical and emotional).	
Time spent with same-sex peers		<i>Violence exposure (1)</i> -Goldner et al. (2010): time spent with same-sex peers did not predict exposure to witnessed and direct community violence.	
3. Family characteristics			
Low socio-economic status (SES)/insufficient family income	<i>Peer victimisation (1)</i> -Barker et al. (2008): Compared to young people following a low/increasing victimisation trajectory, young people following a high/chronic peer victimisation trajectory (over 5.6-6.5 years) from preschool were more like to come from families with insufficient family income (OR 0.46, 95% CI 0.24-0.88). No difference was found between those who followed a	<i>Peer victimisation (1)</i> -Malti et al. (2010): not related to change in peer victimisation ($r = -0.05$).	<i>Moderating effect:</i> -Barker et al. (2008): Extent of victimisation experienced

	<p>moderate/ increasing versus a high/chronic (OR 0.63, 95% CI 0.31-1.29) or low/moderate (OR 0.73, 95% CI 0.52- 1.02) victimisation trajectory.</p>		
<p>Family type/ cluster</p>	<p><i>Violence exposure (1)</i> Sheidow, Gorman-Smith, Tolan, and Henry (2001): Four ‘family clusters’ were identified: exceptionally functioning, task-oriented, moderately functioning, and struggling. None of these clusters were found to directly predict later violence exposure, yet an indirect effect was found.</p>		<p><i>Mediating effects:</i> -Sheidow et al. (2001): neighbourhood cluster (see below definition); struggling families who live in inner-city neighbourhoods with high social organisation experienced the greatest increase in community violence exposure ($\eta^2 = 0.02$).</p>
<p>Maternal conflict</p>	<p><i>Peer victimisation (1)</i> -Georgiou and Fanti (2010): increase in maternal conflict predicted an increase in</p>		<p><i>Moderating effect:</i> Age/ duration of study follow-up</p>

	peer victimisation (physical, relational and emotional) over the first two years of the study, but a decrease in peer victimisation five years later.		
Negative and harsh/reactive parenting	<p><i>Peer victimisation (1)</i></p> <p>-Barker et al. (2008): When compared to young people following a low/increasing peer victimisation (physical, emotional and relational) trajectory, young people following a high/chronic trajectory from preschool were significantly more likely to have mothers who displayed harsh, reactive parenting at baseline (OR 0.85, 95% 0.75-0.96) (Barker et al., 2008). No difference was found between those who following a moderate/ increasing versus a high/chronic (OR 0.63, 95% CI 0.31- 1.29) or low/increasing (OR 0.73, 95% CI 0.52- 1.02) victimisation trajectory.</p>		<p><i>Moderating effect:</i></p> <p>-Barker et al. (2008): Extent of victimisation experienced.</p> <p><i>Mediating effects:</i></p> <p>-Salzinger et al. (2006): Negative parenting was a positive predictor of delinquent behaviour, peer delinquency, teacher-rated externalising behaviour, and peer-reported aggression which were all positive predictors of</p>

	<p><i>Violence exposure (1)</i></p> <p>-Salzinger et al. (2006): Negative parenting (encompassing child physically victimised, parent/child negative verbal behaviour, attachment to parent, and parent involvement) had an indirect (but not direct) relationship with exposure to community violence (witnessed and direct)</p>		<p>violence exposure.</p>
<p>Parenting context</p>	<p><i>Peer victimisation (1)</i></p> <p>-Salzinger et al. (2006): Parenting context (household strain, family life events, behavioural symptoms inventory, community collective efficacy and community and neighbourhood fear) had an indirect (but not direct) relationship with exposure to community violence (direct and witnessed violence assessed together and separately).</p>		<p><i>Mediating effects:</i></p> <p>-Salzinger et al. (2006): parenting context was a significant positive predictor of negative parenting which was an indirect predictor of violence exposure (see above findings for negative parenting).</p>

Maternal involvement		<i>Peer victimisation (1):</i> -Georgiou & Fanti (2010): did not predict change in peer victimisation (physical, emotional and relational).	
Living with a single parent		<i>Peer victimisation (1):</i> -Wolke et al. (2009): did not predict change in peer victimisation (physical, emotional and relational).	
4. Neighbourhood characteristics			
Neighbourhood type (cluster)	<i>Violence exposure (1)</i> -Sheidow et al. (2001): None of the 'neighbourhood clusters' (inner-city without social functioning processes, inner-city with functioning processes, and other urban communities) were found to significantly predict exposure to community violence		<i>Meditating effects:</i> -Sheidow et al. (2001): Family functioning; young people from struggling families living in inner-city neighbourhoods with functioning social

	(witnessed and direct), but indirect effects were reported.		processes experienced a greater increase in exposure to community violence ($\eta^2 = 0.02$).
Neighbourhood violence	<i>Violence exposure (1)</i> -Stewart et al. (2006): Neighbourhood violence predicted an increase in direct violent victimisation 2 years later.		<i>Moderating effect:</i> -Stewart et al. (2006): Young people adopting the street code (defined above) faced an increased risk.
Living in a poor/economically deprived neighbourhood		<i>Violence exposure (1)</i> -Stewart et al. (2006): did not increase risk of direct exposure to violence (10-13 years to 12-15 years).	
5. Environmental context			
Places where		<i>Violence exposure (1):</i>	

children spend time in community		-Goldner et al. (2010): None of the places children spent their time within the community (more time spent in outdoor public places, outdoor private places, or time spent in transition between locations) increased exposure to community violence (witnessed and direct)	
6. Other forms of victimisation			
Previous traditional peer victimisation	<i>Cyber victimisation (1):</i> -Cappadocia (2009): Experiencing other forms of traditional peer victimisation a few months prior to baseline predicted cybervictimisation one year later.		

Note: The number in brackets signifies the number of studies reporting a significant/ non-significant finding for each predictor and each outcome.

6.4.3.1.1. Static individual characteristics.

Static risk factors relate to characteristics of the young person which are unable to change.

Age

The findings on age vary according to the type of victimisation measured. Sexual harassment was found to increase with age, but decrease for peer victimisation. Two studies found that age was not related to changes in community violence exposure or the onset of relational or direct peer victimisation.

Gender

The impact of gender has mostly been explored in relation to peer victimisation. Where a comprehensive assessment of peer victimisation (direct relational, physical and emotional) and relational victimisation (only) were explored, four studies reported no significant gender differences. Four additional studies suggest males face higher levels of physical and/ or emotional/verbal victimisation over time than females, whilst three studies reported non-significant findings.

For other forms of victimisation, females were found to be more at risk of cybervictimisation and peer sexual harassment than males. One study found witnessing violence to be greater for males whilst another reported no significant gender effects (witnessed, direct and 'heard about' community violence exposure). The influence of gender on victimisation therefore appears to be victimisation-specific and dependant on the extent of victimisation assessed.

Non-significant static individual characteristics

One study reported that special educational needs did not significantly predict relational or direct (physical and emotional) peer victimisation.

6.4.3.1.2. Dynamic individual characteristics.

Dynamic individual characteristics are amenable to change and were explored in relation to extrafamilial victimisation in a number of studies.

Physical strength

Physical strength was found to have a significant relationship with peer victimisation (emotional and physical) in the two studies which addressed it, yet the direction of the relationship differed. Variables relating to peer relationships, peer group characteristics and gender were found to mediate and moderate these relationships.

Non-significant dynamic individual characteristics

Neither physical health problems, academic functioning, nor frequency of internet use were found to be significant predictors of direct (physical and emotional) or relational peer victimisation or cybervictimisation (each explored by one study)

6.4.3.1.3. Internalising difficulties.

Internalising difficulties were assessed as a grouped variable or tested on an individual basis.

Internalising problems/ symptoms

In six studies, ‘internalising problems/symptoms’ and ‘emotional vulnerability/ symptoms’ were grouped together to create one variable and in all studies this was found to significantly predict increased physical and emotional peer victimisation at one-year follow up.. However, two studies reported no significant relationship. This therefore suggests that internalising problems, assessed as one categorical variable, appears to have some predictive validity for physical and emotional peer victimisation. This is particularly so when the interaction with peer relationships is considered.

Anxiety and somatic symptoms

Three studies reported a significant relationship between anxiety (and somatic symptoms in one study) and exposure to community violence, cybervictimisation, and physical and verbal peer victimisation (respectively). Two of these studies note the influence of gender and length of follow-up on these relationships. However, social anxiety alone, and combined with social phobia, were not significant predictors of physical or relational victimisation in one study.

Depressive symptoms

The relationship between depression and peer victimisation is inconclusive and seemingly complex. Two studies found this to significantly predict relational, physical and emotional peer victimisation, yet this was influenced by gender and socio-demographic variables. Two further studies reported no significant relationship between depression and peer victimisation. Depressive symptoms were also reported in one study to be a significant risk factor for the ‘onset’ of cybervictimisation

Withdrawal/asocial behaviour

Withdrawal was found to be a significant predictor of peer victimisation in two studies, but a non-significant predictor in one study. .

Daily feeling states

The impact of, and variability in, daily feeling states were found to predict changes in violence exposure (witnessed and direct) in one study, but this was influenced by the type of emotion, duration of follow-up, and age of young people.

Non-significant internalising difficulty

Loneliness was not found to significantly predict peer victimisation in either of the two studies investigating it. Emotional (psychosomatic) health problems did not predict the onset of relational, physical, or emotional, peer victimisation in one study

6.4.3.1.4. Self-related cognitions.

Self-related cognitions have only been explored in relation to peer victimisation in the literature identified.

Self-perception

The one study which explored the relationship between children's perceptions of themselves in the peer group (self-perception) and peer victimisation (physical, emotional and relational) reported significant indirect effects, mediated by peer victimisation and rejection at six months.

Meta-perception accuracy

Meta-perception accuracy was found to significantly predict peer victimisation in one study, but this was moderated by age.

Non-significant self-related cognitions

‘Generality’ and ‘locus composite’ scores were not found to significantly predict peer victimisation in the one study assessing them,

6.4.3.1.5. Attitudinal variables.

Variables relating to attitudes have been explored for their ability to predict an increase in exposure to violence (witnessed and direct) only.

Moral disengagement

Moral disengagement was found to be a significant predictor of direct and indirect community violence exposure in one study.

Attitudes supporting violence

Having high levels of attitudes supporting violence predicted increases in witnessing violence in one study.

6.4.3.1.6. Externalising difficulties.

‘Externalising problems/ problem behaviours’ were grouped together in four studies, whilst externalising difficulties were broken down and assessed as individual behaviours in others.

Externalising problems/ problem behaviours

Three studies assessing externalising problems to predict physical and emotional peer victimisation report contradictory findings; one study reported a significant relationship whilst two studies found no significant effect.

With regard to violence exposure, the findings of the one study varied according to the informant used; teacher-rated problem behaviour was a significant predictor yet parent-rated problem behaviour was not.

Across all four studies, the grouped categories utilise different definitions of emotional and behavioural problems which may account for these contradictions.

Aggression

Studies measuring the impact of aggression on extrafamilial victimisation (peer victimisation and community violence) vary in the informant used (peer, self, teacher, parent-report) and the type of aggression assessed (unspecified, physical, relational). The findings are therefore complex. Six studies reported significant, positive relationships between peer victimisation and varying reports of aggression whilst two studies reported no significant relationship. With regards to the type of aggression assessed, there was contradictory evidence for the impact of physical and relational aggression across two studies. Gender and peer characteristics were found to moderate this relationship, and peer relationship variables were noted as significant mediators.

The two studies assessing the relationship between aggression and violence exposure also differed in the informant of aggression used and the extent to which outcome was explored, with both studies reporting conflicting findings.

Bullying behaviour

Bullying was found by one study to be a significant predictor of physical and emotional peer victimisation.

Delinquency/ offending

Research suggests that delinquency and offending may play an important role in the risk of violence exposure. Two studies reported a significant positive relationship between delinquency and exposure to community violence/ crime in the short term, whilst the direction of the effect differed in the longer term. Duration of follow-up therefore appears to be an important factor when considering the relationship between delinquency/offending and violence/crime exposure.

'Adopting the street code'

Adopting the street code was found to be a significant predictor of exposure to community violence in one study

Non-significant externalising difficulty

Hyperactivity was not found to predict growth in peer victimisation in the one study assessing it.

6.4.3.1.7. Risky behaviour.

Risky behaviours have been assessed in relation to violence exposure only.

High risk behaviour/ alcohol and drug use

When assessed alone, alcohol or drug use did not predict exposure to witnessed violence in two studies. However, alcohol was a significant predictor of direct exposure to community violence in one of these studies. When assessed as

part of a 'high risk behaviour' variable one study reported a significant positive relationship.

Non-significant risky behaviour

One study reported no significant relationship between thrill and adventure seeking/sensation seeking at baseline and changes in community violence exposure over time.

6.4.3.2. Contextual risk factors.

Fewer studies assessed the ability of contextual risk factors to predict extrafamilial victimisation ($N = 17$). These could be classified as; peer relationships, peer group characteristics, family characteristics, neighbourhood characteristics, environmental context, and other experiences of victimisation.

6.4.3.2.1. Peer relationships.

Peer rejection

A complex relationship between peer rejection and peer victimisation was identified. Two studies report a direct positive relationship with physical and emotional peer victimisation whilst one reported an indirect effect only. However, three studies also reported non-significant findings. The one study looking at peer rejection and community violence reported a significant finding.

Friendlessness and alienation

A number of variables relating to friendlessness and alienation within the peer group have been assessed for their ability to predict increased peer victimisation (physical, emotional and relational). However mixed findings have

been reported; two studies reported a significant positive relationship whilst two studies reported no significant relationship.

Peer hierarchies

One study reported a significant relationship between peer hierarchies and relational, but not direct, peer victimisation.

Non-significant peer relationships

One study reported that young people's perception of their peers did not have a direct or indirect effect on peer victimisation. One additional study looked at neglected and controversial peer group status and reported no significant relationship.

6.4.3.2.2. Peer group characteristics.

Peer delinquency

Two studies reported a significant direct and indirect relationship between exposure to violence and peer delinquency, yet they differed in the direction of the effect found.

Peer-group aggression

Two studies reported a significant positive relationship between peer-group aggression and emotional and physical peer victimisation, both of which suggested that high levels of peer-group aggression may increase risk of victimisation for females but protect males. These relationships were influenced by other factors.

Friends' level of internalising problems

One study reported a significant indirect relationship between internalising problems and peer victimisation, moderated by gender and mediated by the type of victimisation assessed.

Friends' physical strength

Friends' level of physical strength was found by one study to predict peer victimisation when peer victimisation was measured in a specific way.

Older peers

One study reported that more time spent with older peers increased exposure to community violence but this was influenced by the duration of the follow-up/ age.

Non-significant peer group characteristics

Friends' levels of victimisation, and time spent with same-sex peers were not found to predict peer victimisation or exposure to community violence in one study each.

6.4.3.2.3. Family characteristics.

Low socio-economic status (SES)/insufficient family income

The findings on socio-economic status (SES) are inconclusive for relational, emotional and physical peer victimisation. One study reported a significant positive relationship, depending on the extent of victimisation assessed, whilst one study reported no significant effect.

Family type/ cluster

An indirect relationship was reported between family cluster and community violence exposure in one study, mediated through neighbourhood cluster.

Maternal conflict

One study found a significant relationship between maternal conflict and peer victimisation, yet the direction of this relationship varied according to age/ length of follow up.

Negative and harsh/reactive parenting

The findings regarding negative and harsh/reactive parenting are mixed. One study reported a significant indirect relationship between negative parenting and exposure to community violence, highlighting a number of mediating variables. Whilst one study exploring peer victimisation reported a significant direct effect moderated by the extent of victimisation experienced.

Parenting context

Parenting context was found to be indirectly related to community violence exposure in one study..

Non-significant family characteristics

Maternal involvement and living with a single parent were not found to significantly predict change in peer victimisation in each study exploring these factors..

6.4.3.2.4. Neighbourhood characteristics.

Neighbourhood characteristics have been explored in relation to risk of violence exposure only.

Neighbourhood type (clusters)

One study explored the predictive ability of ‘neighbourhood clusters’, reporting a significant indirect relationship with exposure to community violence.

Neighbourhood violence

Neighbourhood violence was found by one study to significantly predict violent victimisation, moderated by ‘adoption of the street code’.

Non-significant neighbourhood characteristics

Living in a poor/economically deprived neighbourhood was not found to increase risk of direct exposure to violence in one study.

6.4.3.2.5. Environmental context.

None of the places where children spent their time within the community were found to increase exposure to community violence in one study.

6.4.3.2.6. Other forms of victimisation.

Experiencing other forms of traditional peer victimisation was found to predict cybervictimisation in the one study exploring it,

6.4.4. Protective Factors against extrafamilial victimisation

Individual and contextual protective factors were assessed within 14 of the included studies. All protective factors were assessed for their ability to predict extrafamilial victimisation at follow-up after controlling for baseline levels of extrafamilial victimisation. Table 38 outlines the findings for all of the protective

factors explored along with the significant mediating and moderating variables found.

6.4.4.1. Individual protective factors.

Individual protective factors against peer victimisation and exposure to violence were assessed by eight of the included studies. These protective factors can be grouped into four categories: self-related cognitions, behaviour, attitudes, and internalising factors.

Table 38. Significant and non-significant protective factors for extrafamilial victimisation as reported in the studies included in this review.

Protective factor	Number of studies finding a significant negative relationship between predictor and outcome	Number of studies finding a non-significant relationship between predictor and outcome	Relationship significantly mediated or moderated by another variable
<i>Individual</i>			
1. Self-related cognitions			
Perception of social competence	<p><i>Peer victimisation (2)</i></p> <p>-Romero (2007): Perception of social competence at 8th grade had an inverse relationship with peer and self-reported peer victimisation (physical and emotional) one year later, but not ‘directed’ same-school peer victimisation or received same-school peer victimisation.</p> <p>-Goldbaum et al. (2003): Self-reported levels of social-self competence were higher in ‘non-victims’ at baseline than</p>		<p><i>Mediating variable:</i></p> <p>Romero (2007): Type of peer victimisation assessed.</p>

	those who became victimised by peers (physical and emotional) one year later.		
Self-esteem	<p><i>Peer victimisation (1)</i></p> <p>- Overbeek, Zeevalkink, Vermulst, and Scholte (2010): self-esteem was indirectly related to peer victimisation (relational, physical and emotional) when personality type was taken into account.</p>		<p><i>Meditating effect:</i></p> <p>-Overbeek et al. (2010): inverse relationship for young people classed as ‘over-controlling’ (high on neuroticism, conscientiousness, agreeableness and openness).</p>
Global self-worth	<p><i>Peer victimisation (1)</i></p> <p>-Romero (2007): High global self-worth (no definition provided) directly protected against self-reported and ‘directed’ same-school physical and emotional peer victimisation one year later (Romero, 2007)(Romero, 2007)(Romero, 2007)(Romero,</p>		<p><i>Moderating effect:</i></p> <p>-Romero (2007): Where GSW was low and perceived social competence was also low or medium, there was a significant increase in self-reported and ‘directed’</p>

	2007)(Romero, 2007)(Romero, 2007)(Romero, 2007)(Romero, 2007)and indirectly protected against received same-school victimisation.		same-school physical and emotional peer victimisation. <i>Mediating effect:</i> -Romero (2007): Type of victimisation assessed. Indirect relationship between received same-school victimisation mediated by maintenance of a best friend, having friends who have high or medium physical strength (for males only), and low levels of friends' rejection.
2. Behaviour			
Pro-social/ altruistic behaviour	<i>Peer victimisation (1)</i> -Geiger (2003): Inverse relationship	<i>Peer victimisation (1)</i> -Geiger (2003): not related to change	<i>Mediating variables:</i> -Geiger (2003): Type of

	with physical peer victimisation.	in relational peer victimisation. -Persson (2005): no relationship between early altruistic behaviour and peer victimisation (physical, emotional and relational).	peer victimisation assessed. <i>Moderating effects:</i> -Geiger (2003): Gender; males high in pro-social behaviour experienced a decrease in physical peer victimisation over time (1 year), with the reverse found for those low in pro-social behaviour.
Aggression	<i>Peer victimisation (2)</i> -Persson (2005): children above the mean on aggression at baseline experienced less peer victimisation (physical, emotional and relational) at 20 month follow-up. -Geiger (2003): inverse relationship		

	between high relational and physical aggression at baseline and relational peer victimisation at follow-up.		
3. Attitudes			
Attitudes supporting non-violence	<p><i>Violence exposure (1)</i></p> <p>-Farrell and Sullivan (2004): Students with attitudes supporting non-violence showed smaller increases in witnessing violence than those who did not.</p>		
Empathy		<p><i>Peer victimisation (1)</i></p> <p>-Malti et al. (2010): Non-significant negative correlation between empathy in kindergarten and change in peer victimisation (physical, emotional and relational; $r = -0.03$).</p>	
4. Internalising factors			
Life satisfaction	<p><i>Peer victimisation (1)</i></p> <p>-(Martin et al., 2008): predicted a decrease in relational peer victimisation,</p>		<p><i>Mediating variable:</i></p> <p>Martin et al. (2008): Type of peer victimisation</p>

	but not physical, peer victimisation.		assessed.
<i>Contextual</i>			
1. Peer relationships			
Quality of peer relationships	<p><i>Violence exposure (1)</i></p> <p>-Maldonado-Molina et al. (2010): Quality of peer relationships (sense of belonging, being liked and getting on well) was inversely related to exposure to community violence (witnessed, direct, heard about) two-years later.</p>		
Like-most nominations	<p><i>Peer victimisation (1)</i></p> <p>-Pellegrini and Long (2002): Like-most nominations from friends (nominated as being liked by a number of peers) were negatively related to peer victimisation (physical and emotional).</p>	<p><i>Peer victimisation (1)</i></p> <p>-Wolke et al. (2009) no significant difference in onset of direct (physical and emotional) or relational peer victimisation between those with higher versus lower levels of being liked by peers.</p>	
Peer acceptance	<p><i>Peer victimisation (1)</i></p> <p>-Geiger (2003): inverse relationship with</p>		

	relational peer victimisation.		
Reciprocal/ mutual/ best friendship	<p><i>Peer victimisation (2)</i></p> <p>-Hodges et al. (1999): having a best friend in the 4th and 5th grade significantly predicted a decrease in peer victimisation (physical and emotional) one-year later.</p> <p>-Geiger (2003): Young people with a mutual friendship in the 3rd grade were lower in relational victimisation at baseline and experienced a slight decline over time (3 years).</p>	<p><i>Peer victimisation (3)</i></p> <p>No relationship between best friend maintenance (Romero, 2007), and reciprocal number of friends at baseline and emotional and physical peer victimisation at follow-up (Hodges & Perry, 1999; Pellegrini & Long, 2002; Romero, 2007).</p>	
Trust in peer relationships		<p><i>Peer victimisation (1)</i></p> <p>-Goldbaum et al. (2003): did not protect against the onset of peer victimisation (physical and emotional).</p>	
Affection in peer relationships		<p><i>Peer victimisation (1)</i></p> <p>-Goldbaum et al. (2003): did not</p>	

		protect against the onset of peer victimisation (physical and emotional).	
2. Peer group characteristics			
Time spent with opposite sex peers	<p><i>Violence exposure (1)</i></p> <p>-Goldner et al. (2010): inverse relationship with exposure to community violence (witnessed and direct) for males (not females) between 6th and 7th grade but not 7th to 8th grade.</p>		<p><i>Moderating variables:</i></p> <p>-Goldner et al. (2010): Gender and age.</p>
Delinquent peers	<p><i>Violence exposure (1)</i></p> <p>- Maldonado-Molina et al., (2010): inverse relationship with exposure to community violence over 2 years (5-15 years) despite higher levels of delinquent peers reported amongst victims compared to non-victims at baseline.</p>		

3. Family context			
Coercive discipline	<i>Violence exposure (1)</i> -Maldonado-Molina et al. (2010): inverse relationship with exposure to community violence over 2 years (with young people aged between 5-15 years), despite higher levels of coercive disciplines reported amongst victims compared to non-victims at baseline.		
Time spent with parents and extended family		<i>Violence exposure (1)</i> (Goldner et al., 2010): not related to exposure to community violence (witnessed and direct) one year later.	
Time spent at home		<i>Violence exposure (1)</i> - Goldner et al. (2010): not related to exposure to community violence (witnessed and direct) one year later.	
4. School context			
Time spent in school	<i>Violence exposure (1)</i>		<i>Moderating variables:</i>

	-Goldner et al. (2010): inverse relationship with exposure to community violence (witnessed and direct) for females (not males) in from 7 th to 8 th grade but not 6 th to 7 th grade.		-Goldner et al. (2010): Gender and age.
Negative school environment	<i>Violence exposure (1)</i> -Maldonado-Molina et al., (2010): inversely related to exposure to community violence over 2 years with young people aged between 5-15 years, despite higher levels of negative school environment reported for victims at baseline.		
5. Environmental context			
Cultural stress	<i>Violence exposure (1)</i> -Maldonado-Molina et al., (2010): cultural stress (acculturation, defined as intergenerational conflict over the		

	importance of cultural values) was inversely related to exposure to community violence over 2 years, despite higher levels of acculturation amongst victims at baseline.		
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6.4.4.1.1. Self-related cognitions.

Perception of social competence

Two studies found perception of social competence to significantly protect against peer victimisation, yet this depended on the way in which victimisation was assessed in one of the studies.

Self-esteem

One study reported a significant indirect relationship between self-esteem and peer victimisation mediated by personality type.

Global self-worth

One study reported a complex inverse relationship between global self-worth and peer victimisation, identifying a number of mediating and moderating variables.

6.4.4.1.2. Behaviour.

Pro-social/ altruistic behaviour

Two studies assessing the relationship between pro-social/altruistic behaviour and peer victimisation report contradictory findings and highlight the importance of gender and the type of victimisation assessed.

Aggression

Contrasting with the usual findings on aggression as a risk factor for future victimisation, two studies reported a significant inverse relationship between aggression and peer victimisation.

6.4.4.1.3. Attitudes.

Attitudes supporting non-violence

One study reported a significantly smaller increase in witnessing violence for young people with attitudes supporting non-violence than those without.

Non-significant attitudes

Empathy was not found to significantly protect against peer victimisation in the one study which explored it.

6.4.4.1.4. Internalising factors.

Life satisfaction

One study reported a significant inverse relationship between life satisfaction and relational, but not physical, peer victimisation.

6.4.4.2. Contextual protective factors.

Contextual protective factors against peer victimisation and exposure to community violence were assessed by nine of the included studies. These protective factors can be grouped into five categories; peer relationships, peer characteristics, family context, school context and environmental context.

6.4.4.2.1. Peer relationships

Quality of peer relationships

One study reported a significant inverse relationship between quality of peer relationships and exposure to community violence.

Like-most nominations

Two studies explored the relationship between ‘like-most nominations’ from friends and peer victimisation, one reporting a significant negative relationship and one reporting no significant relationship.

Peer acceptance

Peer acceptance was reported to be significantly negatively related to peer victimisation by one study.

Reciprocal/ mutual/ best friendship

Reciprocal, mutual, and best friendship variables were grouped together in this section as they all relate to a similar issue. However, findings were mixed over the five studies which assessed the relationship between these variables and peer victimisation; two studies reported a significant inverse relationship whilst three studies reported a non-significant relationship.

Non-significant peer relationships

One study found that neither trust nor affection in peer relationships protected against the onset of peer victimisation.

6.4.4.2.2. Peer group characteristics

Opposite sex peers

Time spent with opposite-sex peers was significantly negatively related to peer victimisation in one study but this was moderated by gender and age.

Peer delinquency

One study reported a significant inverse relationship between peer delinquency and exposure to violence over time.

6.4.4.2.3. Family context

Coercive discipline

One study reported a significant inverse relationship between coercive discipline and change in exposure to community violence.

Non-significant

The time spent with parents and the extended family and the time spent at home were not found to significantly protect young people from exposure to community violence in the one study exploring them.

6.4.4.2.4. School context

Time spent in school

Time spent in school was significantly negatively related to peer victimisation in one study, but this was moderated by gender and age.

Negative school environment

Negative school environment was significantly inversely related to change in exposure to community violence in one study.

6.4.4.2.5. Environmental context

Cultural stress

Cultural stress was found in one study to be significantly inversely related to exposure to community violence.

6.5. Discussion.

6.5.1. Risk Factors

The risk factors synthesised in this review cannot be used to suggest the onset of first-time victimisation as no cohort study assessed lifetime peer victimisation at baseline. Findings therefore relate to risk factors for the presence of peer victimisation over the course of a study, or change in the extent of victimisation over the duration of the study.

Numerous risk factors have been synthesised and explored within this review. Many were assessed by only one study which prevents any conclusion as to their predictive validity and identifies areas for further research. However, a number of risk factors were assessed by more than one study and therefore a pattern regarding their significance can be identified. These risk factors are summarised in the proceeding discussions and highlight potentially important areas for targeted intervention. Of note, this review also highlights a number of indirect relationships between predictor and outcome, drawing attention to important mediating and moderating variables.

Only one study was identified which explored predictors of peer sexual harassment, cybervictimisation, or 'crime'. As a result, no conclusion as to

important risk or protective factors could be established for each outcome. Further research is therefore vital in these areas.

There was limited overlap in the significant predictors identified for both violence exposure and peer victimisation. In part, this relates to the smaller number of studies exploring violence exposure compared to peer victimisation, and also a difference in focus when selecting which risk factors to investigate. However, it indicates possible difference in risk factors according to the type of victimisation experienced. This may reflect the different dynamics and context of these forms of victimisation, suggesting that whilst they are linked in terms of increased likelihood of exposure to one following exposure to the other, they represent distinct phenomena. In spite of this, similar findings have been reported on many of the specific risk factors identified, suggesting an element of overlap between violence exposure and peer victimisation. This should be explored more in future research to allow for more robust conclusions to be drawn. The current review also identifies other, more specific, risk factors which may only be useful when assessed in relation to a particular outcome. This includes factors such as adoption of the street code in relation to community violence exposure. This must therefore be considered when attempting to determine important predictors of victimisation to target for intervention.

Of note, the findings from this systematic review show how risk factors across all levels of the young person's ecology, along with factors relating to their routine activities, appear to play a role in their risk of extrafamilial victimisation. The indirect effects found and the interaction between risk factors across a number of individual and contextual levels show how different areas of the young person's

life interact to influence their risk of victimisation. Risk should therefore be considered a multifaceted phenomenon and the temptation to explore the influence of specific risk factors, irrespective of their interaction with other risk factors, should be resisted.

6.5.1.1. Risk factors for peer victimisation.

Experiences with physical and emotional victimisation were the two aspects of peer victimisation most commonly researched. Gender (increased risk for males), physical strength, grouped assessment of internalising problems/emotional problems, and peer group aggression (increased risk for females; protective for males) have all been found by the majority of studies to significantly increase the risk of physical and emotional victimisation. When a comprehensive assessment of victimisation was used however (physical, emotional and relational), gender was not found to significantly predict outcome. Findings for emotional (psychosomatic) symptoms as a predictor also varied according to the way in which outcome was defined. This highlights the importance of the definition of outcome used.

The grouped category ‘friendlessness and alienation’ appears to have predictive significance to increase the risk of all forms of peer victimisation, as does aggression reported by a number of different informants. Withdrawal/asocial behaviour was also highlighted as a potentially important risk factor to be explored in further research. Loneliness and externalising/behaviour problems (the latter assessed as a grouped variable) were not found by both studies assessing it to significantly predict peer victimisation.

A number of inconclusive variables were also highlighted within the review. Socioeconomic status, peer rejection and depression were all found to be significant

predictive variables in some studies, and unrelated in others. Further research is therefore needed to explore the role of these risk factors in more detail.

When looking at overall categorical predictors of peer victimisation, two of the three variables explored under the ‘self-related cognitions’ category were found to have a significant direct and/or indirect relationship with peer victimisation. However, each variable within this category was assessed by just one study.

6.5.1.2. Risk factors for exposure to violence.

A smaller amount of studies longitudinally explored the risk factors for exposure to violence, therefore limiting the strength of any conclusions to be drawn regarding their predictive utility. Only delinquency/offending had received enough research to suggest it was a potentially important risk factor. However, this appeared to be influenced by the duration of follow-up.

A number of risk factors had been explored across more than one study yet the overall finding as to the predictive ability of these risk factors was inconclusive findings due to conflicting significant and non-significant results. These include: anxiety, gender, aggression and the categorical variable of ‘neighbourhood characteristics’. Findings on risky behaviour/alcohol and drug use were also inconclusive, but it may be that they are significant predictors of direct violence exposure but not witnessed violence. Further research should therefore explore these potential risk factors in more detail.

With regards to categories of predictors, both of the variables relating to a young person’s attitudes significantly predicted an increase in violence exposure over time and therefore warrant further exploration. A complex picture emerged when reviewing the variables assessed as part of the ‘family characteristics’

category, with all three variables found to have a significant indirect effect only. These relationships were mediated through the presence of other family and community or individual characteristics.

6.5.1.3. Mediating and moderating variables.

Common mediating and moderating variables for peer victimisation and violence exposure were identified across the few studies which explored indirect effects. Gender, peer relationships and social competence appear to be potentially important moderating variables which changed the impact of the relationship between predictor and outcome. With regards to mediating variables, participant age, neighbourhood and family influence (in relation to violence exposure), and negative behaviour such as aggression and delinquency, all determined whether a significant relationship between predictor and outcome was found. Additionally, variables relating to study design, such as the length of follow-up and the informant used to predict exposure and outcome were also found to have an effect on outcome. These issues therefore need to be considered in the design and interpretation of research.

Given the amount of mediating and moderating variables identified from the small number of studies which assessed them, it is apparent that intervening variables warrant careful consideration when attempting to identify predictors of extrafamilial victimisation. In many cases these factors highlight a relationship between individual and contextual risk factors and reveal complex interactions between variables. Where variables counteract the influence of a predictor to increase the risk of a young person being victimised, their importance as protective factors should not be underestimated. Intervention should therefore be mindful of

these interactions and work with them to improve outcome. It is also important that researchers do not neglect indirect pathways within the research carried out in this area.

6.5.2. Protective Factors

Far less attention was given to protective factors within the studies included in this review compared to risk factors, yet a number of potentially important factors were highlighted. These were mainly assessed in relation to peer victimisation, with one study exploring protection against violence exposure. The summary below therefore relates to peer victimisation and not violence exposure. Again, these findings only relate to protection against a change in victimisation over time, and not the onset of victimisation.

6.5.2.1. Protective factors against peer victimisation.

Social self-competence was the only predictive factor identified which had more than one study with significant findings, therefore suggesting it to be an important protective factor. This was in relation to physical and emotional peer victimisation and may be influenced by the way in which outcome was measured. Prosocial/altruistic behaviour appeared to be a potentially important predictive factor yet findings were influenced by the measurement of peer victimisation used. Finally, like-most nominations and reciprocal/mutual/best friendship variables had conflicting evidence regarding their predictive utility and more research is needed to explore these further.

Three variables were explored by three studies in the category 'self-related cognitions' for their protection against peer victimisation. These relationships were

found to be directly or indirectly related to peer victimisation, influenced by other individual characteristics which mediated or moderated the relationship in some cases. The findings relating to the category of 'behaviour' were relatively inconclusive, with two studies suggesting aggressive behaviour protected against peer victimisation, and one suggesting altruistic/pro-social behaviour protected males. It must be noted that the definitions of peer victimisation were different in each of these and this should be explored in future research.

It should be noted that a number of variables explored in the study by Maldonado-Molina et al., (2010) were surprisingly inversely related to exposure to community violence (e.g., coercive discipline, peer delinquency), suggesting they may act as protective factors. However, the authors of this study make no attempt to explain these findings and report significantly higher levels of these variables in 'victims' compared to 'non-victims' at baseline.

6.5.2.2. Mediating and moderating variables.

Age, personality type, individual characteristics and factors relating to peer relationships were all found to be significant mediating variables leading to an indirect relationship between predictor and outcome, or eliminating the influence of a protective factor. Again, an interaction between individual and contextual predictive factors has been identified in this section of the review in support of the ecological theory of extrafamilial victimisation. Gender was the only moderating variable identified whereby the influence of a predictor appeared to differ for males and females.

The majority of protective factors reported in this section of the review were found to significantly protect against extrafamilial victimisation. This highlights the importance of further research in this area to understand more about protection. Many of the protective factors included in this review were not initially explored as protective factors within the original research studies. However, identification of an inverse relationship in these studies was reported as a significant predictive factor (e.g., protective factors such as ‘empathy’ were originally explored as ‘lack of empathy’ in the initial study). This should be considered in other reviews carried out in this area.

6.5.3. Overall completeness and applicability of evidence.

This review was concerned with establishing longitudinal relationships and a stringent inclusion criterion was therefore applied. A total of 37 studies were identified as meeting the inclusion criteria. None of the findings from these studies can provide an indication of risk or protective factors for true first-time victimisation, as no study was identified which looked at the onset of first-time victimisation. This therefore highlights an important gap in this area of the research. However, the number of relevant studies found indicates a positive shift from cross-sectional research towards longitudinal cohort studies with sufficient follow-up periods. An imbalance existed between the larger numbers of longitudinal studies focussing on risk factors compared to the smaller number of studies focusing on protective factors.

There were similarities across the populations used in the included studies, with the majority of authors sampling a mix of males and females in middle

childhood, from urban communities, and from ethnic majorities. However, there was also variation in each of these areas and the socio-economic status of the young people sampled. The similarities across sample characteristics allow for a more valid comparison between the findings of studies, whilst the differences identified provide richness in the data. However, population differences also limit the reliability of some of the comparisons within the review and these therefore should be borne in mind when interpreting the findings.

The majority of findings relate to peer victimisation and, to a lesser extent, violence exposure. Therefore, the review is limited in its utility to suggest important risk or protective factors for sexual harassment/victimisation, cybervictimisation, or crime exposure (all assessed by one study each). The author aimed to explore risk and protective factors individually, instead of grouping them into categories. In doing so, the review is able to indicate specific variables which may be useful for the prediction and prevention of extrafamilial victimisation and which warrant further exploration. Additionally, the type of victimisation assessed and the completeness of the outcome measures used have been highlighted as important determinants of outcome. Indirect relationships have also been identified as well as mediating and moderating variables which provide useful information as to when victimisation may occur. Of note, a relationship between individual and contextual risk factors has been highlighted and the interaction between risk and protective factors to eliminate or exacerbate risk has been outlined. These findings provide support for the ecological systems analysis model of extrafamilial victimisation (Hong & Espelage, 2012) and reinforce the need to further explore these interactions.

6.5.4. Quality of the evidence.

Considerably large samples were used in the majority of studies (eight= > 1,000 participants, six= >500 participants, nine= >250 participants, 11= >100 participants, and two= < 99 participants) and the review incorporated research findings based only on longitudinal research which had follow-up periods greater than a year and controlled for baseline levels of victimisation. Whilst these features set the standard of included studies higher than cross-sectional or very short-term longitudinal designs (i.e., <1 year follow-up), a great deal of bias was identified in the included studies. In addition, a lot of information was missing from studies about the characteristics of the participants used (e.g., gender, ethnicity, SES, etc.). As the findings and conclusions of this review are based on the studies which it is made up of, the quality of these studies and their associated levels of bias will invariably have an impact on its quality.

None of the seven areas of bias explored were rated as 'low' in more than 50% of studies. Of note, risk of outcome measurement bias and attrition bias was only rated as 'low' in 8% and 3% of studies, respectively. Poor reporting as to the testing of the measures used and the characteristics of the final sample meant the vast majority of studies were deemed as 'unclear' or 'high' risk in these areas. This therefore introduces an element of uncertainty over the impact of the risk and protective factors reported as significant within this review. It also limits the reliability with which the findings can be generalised to all populations of young people. Importantly, bias in the classification and identification of victims within these studies is of great concern for the reliability of the findings. This is due to the

likelihood of these studies over- or underestimating the presence and strength of a relationship between a predictor variable and outcome (victimisation). It also means that the findings from studies will have been combined in this review based on perceived categorical similarities (e.g., 'peer victimisation') when they may differ in important ways (e.g., the omission of 'relational peer victimisation'). In doing so, the conclusions of this review regarding significant predictors of extrafamilial victimisation are limited by the level of measurement outcome bias identified and the synthesis of findings based on inconsistent measures of the outcome variable. Where possible, the type of victimisation assessed by each study was outlined in the results section to allow the reader to judge the extent of the consistency between studies in their definition and exploration of victimisation.

A high risk of reporting bias and lack of control over confounding variables was also identified in a third of studies. This may be partly due to word restrictions for publication, yet they are important elements of a study when determining the reliability and validity of its findings. This is because reporting bias limits the use of these studies within the review and potentially masks important findings. There are also likely to be many confounding factors impacting on the relationship between predictors and outcome which have not been looked at in these studies. As such, the relationships reported between predictor and outcome variables may be misestimates due to a failure by authors to recognise the influence of important confounding factors. Consequently, this synthesis of the findings from studies where confounding variables have been overlooked is also hindered by the same issue. Further work is needed to control for the impact of known variables on outcome (e.g. gender) and to explore such interactions in more detail.

Where predictive factors were assessed in more than one study, the findings were largely consistent, particularly when the type and comprehensiveness of the assessment of outcome was considered. However, some inconsistency across studies was reported which may reflect true discrepancies or may be related to heterogeneity within the included studies (e.g., sample characteristics) or the level of bias identified (as discussed above). Nevertheless, important findings as to the ability of specific predictors to predict outcome, as well as the interaction between variables, have been determined within this review.

6.5.5. Potential biases in the review process and limitations of the review.

The potential for bias in the review process was minimised by searching a range of published and unpublished material, including studies published in all languages (identified within English-language databases), unpublished dissertations and theses, and grey literature. It is nevertheless recognised that publication bias may still exist within the review. Additionally, a second reviewer applied the inclusion checklist and quality assessment checklist to assess the reliability of these stages. It was not possible to gain access to seven studies identified in the inclusion stage of the review, yet they appeared unlikely to meet the inclusion criteria based on their title and/or abstract.

It was not possible or desirable to quantitatively synthesise the findings from the studies included in this review (see section 6.3.9. for a discussion of this). Narrative synthesis was therefore selected whereby significant and non-significant findings were counted across studies to suggest the strength of a predictor. There are limitations to adopting this method in that all studies were given equal weighting in

the synthesis in spite of its size (power) and quality. In doing so, the findings from smaller studies with a higher level of bias will have been given as equal weighting as larger, better quality studies. Nevertheless, this was the most appropriate form of data synthesis to address the aims of this review.

6.5.6. Agreements and disagreements with other studies or reviews.

By focussing on specific predictors of extrafamilial victimisation as opposed to theoretical categories of predictors, the findings from this review are more detailed than the other reviews and meta-analyses that have been carried out in this area. The definition of victimisation used has also been considered and in doing so, differences in outcome have been identified. With this in mind, the findings of this review are not as clear cut as those reported in others. Instead, a more complex pattern of risk and protective factors has been identified, highlighting the role of mediating and moderating variables and outlining conflicting findings for the variables included within grouped categories. They also highlight a need to assess the individual factors which make up these grouped categories of predictors to separate out important and redundant predictors.

In spite of this, a number of consistencies were identified between the findings of this review and other reviews. Reijntjes et al. (2010) and Cook et al. (2010) noted the importance of internalising problems, on the whole, as risk factors for peer victimisation. This is largely supported by the findings, presented here, when a variable which grouped together ‘internalising problems’ was assessed within studies. However, the mixed findings on the specific predictors making up

this category, which were identified in the results section of the current review, highlight a need to explore these individual variables further.

Looking at risk factors for ‘pure’ peer victimisation, Cook et al. (2010) found the category ‘peer status’ (quality of peer relationships) to be an influential contextual predictor. In the current study, certain variables relating to peer relationships were found to be significant predictors as well as significant moderating variables. However, the findings were mixed. The current review also found that some elements of peer relationships work as protective factors, so it is important that individual characteristics are specified rather than referring to a grouped category.

The moderating variables outlined in the review (not systematic) by Buka, Stichick, Birdthistle and Earls (2001) (age, gender, caregiver demographics, family structure, school characteristics and peer relationships) were largely supported by the findings in the current review. Additionally, Jones et al. (2012) noted problems in the definition and methods used to assess violence amongst included studies. They also note a lack of control over confounding variables in the studies assessed, reiterating the quality issues identified within the current review.

6.5.7. Theoretical understanding of the risk and protective factors for extrafamilial victimisation.

The findings from this review support the ecological systems analysis model of extrafamilial victimisation (Hong & Espelage, 2012), as risk and protective factors were found to operate and interact across many levels of the young person’s ecology. This includes factors within the microsystem (e.g., interaction between the

young person and others), the exosystem (e.g., neighbourhood context), and the chronosystem (e.g., age). The interaction between factors operating at each of these levels, as well as the interaction between risk and protective factors, supports the notion by Hong and Espelage (2012) that these complex systems need to be more properly understood in order to design effective intervention strategies.

The findings from the review also provide support for the routine activities theory of victimisation (Miethe & Meier, 1994). A number of individual characteristics (i.e., ‘target attractiveness’) relating to the young person’s internal and external functioning and behaviour were found to increase their risk of extrafamilial victimisation or protect them from it. The types of behaviour suggested in previous research to increase a young person’s exposure to potential offenders (i.e., ‘exposure to crime and a motivated offender’), such as drinking alcohol, offending behaviour and peer delinquency (e.g., Felson et al., 2013; Sparks, 1982), were all found to be predictors of extrafamilial victimisation in the short-term. Additionally, factors relating to parental relationships and the family context, whilst found to be inconclusive in some studies, were found to be predictive of victimisation in others. This may provide support for the suggestion that weaker social bonds encourage young people to spend time away from the home (thus increasing their time spent in the community) and may afford them less parental protection (i.e., ‘guardianship’). Interpreting the findings of this systematic review within the context of the RAT therefore provides us with a better understanding of the processes involved in extrafamilial victimisation. This is in terms of the interaction between predictive factors which may come together to expose a young person to, or protect them against, extrafamilial victimisation.

The benefits of the RAT and ecological systems analysis model can therefore be seen when reviewing the findings of longitudinal research in relation to the risk and protection of young people against extrafamilial victimisation.

6.5.8. Implications for practice.

The findings of this review suggest that individual and contextual risk and protective factors interact to increase or decrease a young person's risk of victimisation outside of the family. It is therefore important that a holistic approach to risk assessment and prevention is adopted to target intervention towards more than one of these areas. In doing so, a more holistic understanding of the young person and the risk and protective factors within different areas of their ecology can be gained. Targeting intervention towards a number of different areas of the young person's ecology could also achieve positive changes in more than one area of the young person's life which is likely to promote greater outcomes. Indeed, Smith, Schneider, Smith, and Ananiadou (2004), note that victimisation is a systemic group process involving bullies, victims, peers, adults, parents, home and school environments and therefore intervention in just one area is unlikely to have a significant consistent impact. Additionally, our understanding of protective factors should be applied alongside that of risk factors to both encourage protection and decrease risk. There is therefore a need to consider risk on an individual basis rather than applying a 'one size fits all' approach to prediction. The findings also highlight a need to work with individual predictors, as opposed to categories of predictors, for more accurate identification. The predictive factors found to have the most significant research backing within the current review suggest that intervention may

be the most effective if it aims to improve the mental well-being of young people, encourage healthy and supportive relationships between peers, reduce aggression and delinquency, and promote positive attitudes and behaviours.

Whilst this review has been effective in highlighting the prevalence of the interaction found between variables, much more research is needed to provide greater focus on this area. Future reviews in this area should also focus on synthesising findings relating to mediating and moderating variables. From this, further improvements to intervention can be suggested.

6.5.9. Implications for research.

It is likely that the studies included in this review assessed a number of commonly explored factors, such as age, gender, family demographics/background characteristics, which were not assessed or reported in their final publication. Should this data be reported in future studies, or made available to reviewers, the potential to explore these risk and protective factors across a large number of studies and participants would be great. Additionally, a lack of reporting of non-significant findings, as well as standard error and exact p-values, prevented any attempt to statistically synthesise the findings, should this have been deemed appropriate. Better reporting of research findings should therefore be encouraged to assist data synthesis.

In terms of research design, it is important that future research explores the onset of victimisation from birth to adulthood. Only by doing so are we able to more accurately explore first time victimisation, as opposed to secondary victimisation. Ideally, this would involve a longitudinal cohort study starting at birth to age 18.

However, improving the design of cohort studies so that lifetime victimisation is assessed at baseline would also help to achieve this. At present, we are only able to judge risk and protective factors on their ability to predict onset or change in victimisation over the course of a study, ignoring previous experiences.

The quality of the research in this area must be improved to reduce bias and work towards consistency in outcome. Whilst the samples of participants used were fairly large, there were particular problems with population bias, measurement bias, and attrition bias. The definition of victimisation and the way in which predictive factors are operationalised in the literature (i.e., to assess onset or change in victimisation) also need to be improved, paying particular attention to the measures used to assess victimisation. In doing so, attention should be given to the consistency and the comprehensiveness of the definition of victimisation used. The STROBE statement (von Elm et al., 2007) should also be followed in the reporting of all observational studies. Table 39 provides a suggestion for the design of future research in this area.

Table 39. Suggestions for improving the design of future research in this area.

Design:	<ol style="list-style-type: none"> 1. Cohort studies carried out from birth until adulthood. 2. Cohort studies over a set duration (minimum 1 year) which assess lifetime victimisation at baseline. 3. Cohort studies assessing longer-term outcomes (1+ year) and comparing short and longer-term outcomes.
Population:	<ol style="list-style-type: none"> 1. Population representative of target population. Ideally including a mix of young people from different backgrounds. 2. Where a large age group is used, older and younger children to be assessed separately or age entered as a covariate. 3. Characteristics of final sample to be reported following attrition.
Measurement of the predictor:	<ol style="list-style-type: none"> 1. Use of standardised measures which are also validated on the current sample. 2. Inclusion of basic demographic variables as predictors where possible. 3. Methodology the same for all participants.
Measurement of the outcome:	<ol style="list-style-type: none"> 1. Clearly defined and comprehensive definition and assessment of victimisation. 2. Use of standardised measures which are also validated on the current sample. 3. Use of previously designed questionnaires where possible to facilitate comparable data. 4. Consideration of 'pure victims' and 'bully/ aggressive victims'. 5. Methodology the same for all participants. 6. Impact of mediating and moderating variables explored.
Notes:	<ol style="list-style-type: none"> 1. Confounding variables to be controlled for with gender and age controlled as a minimum. 2. All results reported regardless of significance, including standard error and exact p-values.

6.5.10. Conclusions.

The findings of this review highlight the potential of a number of variables to increase risk or protect young people from victimisation within the school and community. When utilising these variables to protect against victimisation, consideration as to the type of victimisation assessed and the way in which it is defined is important. Gender differences should also be considered, as should the interaction between variables and the role of mediating and moderating factors.

Our understanding of protective factors should be applied alongside that of risk factors to both encourage protection and decrease risk. There is therefore a need to consider risk on an individual basis rather than applying a 'one size fits all' approach to prediction. Prevention efforts should not be narrow in their focus, with the greatest results likely to be seen from programmes which attempt to address a range of individual and contextual factors.

Whilst the quality of research in this area has improved, further improvements are needed to address common areas of bias, particularly population bias and the measurement of victimisation.

Chapter 7: Thesis Discussion and Conclusions

7.1. Chapter Overview

The final chapter of this thesis brings together the findings from study one and study two and reviews the contribution of these two studies towards our understanding of extrafamilial victimisation. This is within the framework of the routine activities theory (RAT) and ecological theory of extrafamilial victimisation. A new integrated model of victimisation is then proposed whereby vulnerabilities to victimisation and the different pathways leading towards victimisation (based on the influence of mediating and moderating variables) are acknowledged as two distinct, yet interacting factors. Following on from this, the contribution of the findings within the thesis in relation to the prevention of extrafamilial victimisation is discussed, as are the directions for future research in this area.

7.2. Overview and Contribution of the Main Research Findings

The focus of this thesis was on the extrafamilial victimisation of children and young people, which was explored in one primary and one secondary empirical research study. Study one and study two provide a comprehensive overview of the:

1. Prevalence and characteristics of extrafamilial victimisation, and the characteristics of the victims and the perpetrators;
2. Factors associated with extrafamilial victimisation;
3. Prospective risk factors for, and protective factors against, extrafamilial victimisation;

4. Impact of extrafamilial victimisation on the psychological well-being of young people.

These studies highlight the multidimensionality of extrafamilial victimisation and reveal complex interactions between varying levels of the young person's ecology which appear to exacerbate or reduce the risk of victimisation and its impact. In doing so, the findings from these two studies provide an empirical basis on which to guide future research in this area. They also provide an indication as to the necessary focus and development of school and community-based interventions to protect young people and identify those most 'at risk'.

The differing elements of the thesis have been explored within the context of the RAT and ecological theory of extrafamilial victimisation. In doing so, the research has been embedded within two well-known theoretical frameworks. This has created a level of reciprocity whereby the development and interpretation of the findings from this research have been guided by theory and, in return, provide evidence to support or refute these theories. The depth and level of understanding gained from the current research is therefore enhanced by drawing upon more than one theory of victimisation.

7.3. Support for the Theories of Extrafamilial Victimisation

7.3.1. Routine activities theory (RAT).

The RAT suggests that (1) the young person's proximity to crime, (2) exposure to crime and a motivated offender, (3) target attractiveness (based on the young person's individual characteristics), and (4) guardianship combine to influence the likelihood of extrafamilial victimisation (Miether & Meier, 1994).

The main support for the RAT of extrafamilial victimisation within this thesis comes from study one whereby the young person's risky behaviour (drinking alcohol), increased likelihood of exposure to motivated offenders (offending behaviour and association with delinquent peers), and lower levels of parental guardianship were found to predict an increased risk of community-based extrafamilial victimisation. Additionally, exploration of the location of extrafamilial victimisation revealed how guardianship within school and community locations may influence the extent, type and severity of victimisation. Finally, findings from the systematic review carried out within the second study also provide support for the RAT. This is from the findings across a number of longitudinal empirical research studies which show how many risk and protective factors associated with the different elements of the RAT were significant predictors of extrafamilial victimisation.

Nevertheless, some elements of this thesis refuted the hypothesised findings based on the RAT and this has been discussed in Chapter 5. Specifically, the amount of time spent in the community and the places young people go with friends were not found to be predictive within study one, nor were these found to be significant risk factors within study two (Goldner et al., 2010). Additionally, the level of parental guardianship after school, and increased supervision in the form of after-school activities, were not found to increase or decrease the likelihood of victimisation in the community, nor were the characteristics of the journey home from school, including the time spent in the community, the amount of the journey carried out with friends, on victimisation on these journeys. This is against the principles of the RAT and some of the previous literature in this area in relation to

participation in after-school clubs (e.g., Peguero, 2009). However, these findings do concur with other research findings which have suggested the characteristics of the journey home from school may have little impact on extrafamilial victimisation (Lee et al., 2012).

In all, the research presented within this thesis provides evidence to support many of the principles of the RAT in regards to community-based extrafamilial victimisation. However, the non-significant findings require further investigation. This is to explore whether this theory can be applied to all forms of community-based extrafamilial victimisation at all times, or whether it is specific to certain times and certain activities.

7.3.2. Ecological theory.

The most recent ecological systems analysis model by Hong and Esplenage (2012) builds on the original ecological theory of extrafamilial victimisation by Cicchetti and Lynch (1993). This theory attempts to explain bullying and peer victimisation by separating out the different ecological systems into six levels: (1) youth characteristics, (2) the microsystem (interaction between the young person and individuals or groups of individuals within their immediate settings), (3) mesosystem (interrelations between two or more microsystems), (4) exosystem (impact of the environment beyond the immediate setting, such as the neighbourhood), (5) macrosystem (cultural 'blueprints' such as wider cultural beliefs), and (6) chronosystem (consistency or change in the individual or environment over time). Within this model factors within each level of the young person's ecology are said to interact to influence the likelihood of victimisation.

This also helps to explain how victimisation may impact on the well-being of the young person.

The ecological systems theory was applied within Study one and Study two. Doing so allowed for recognition of the varying influential factors relating to extrafamilial victimisation across many different levels of the young person's ecology. It also emphasised the importance of recognising these interactions to aid our understanding and to help in the design and implementation of interventions. The impact of extrafamilial victimisation on the psychological well-being of young people was found to be moderated by the young person's social support (microsystem) on one occasion, but stronger findings may have been identified should a larger sample have been used and a more reliable measure of social support have been selected for the research. Victimisation experienced within differing environments (i.e., different exosystems) was also found to have an additive impact on the young person's psychological well-being compared to victimisation experienced in just one environment. Finally, risk and protective factors across varying levels of the young person's ecology were found to be significant predictors of extrafamilial victimisation. The findings from this thesis therefore provide support for the ecological systems theory of extrafamilial victimisation (particularly the exosystem and microsystem) as a way of improving our understanding of this multidimensional, multifaceted, issue. However, further research is needed to address the limitations of study one in order to explore this with more confidence.

7.3.3. Is it possible to achieve one holistic theory of extrafamilial victimisation?

Criticisms of the different theories of extrafamilial victimisation are often based on the theories' inability to explain all types/categories of extrafamilial victimisation. For example, Finkelhor (2008) suggested that the RAT is best applied to stranger-perpetrated criminal victimisation on the streets and criticised its ability to provide a useful explanation as to why young people who do not put themselves at risk are victimised by acquaintances outside of the family. There is therefore an emphasis on developing one overarching, holistic theory of extrafamilial victimisation which can explain all types of victimisation under all circumstances, and within all locations. The motivation to pursue this goal appears to be based on research findings that different types of victimisation are interlinked and vulnerability to any kind of victimisation is increased following initial exposure.

However, extrafamilial victimisation varies by context, perpetrator and victim characteristics. As such, there are likely to be differences between a one-off stranger-perpetrated robbery in the street, which appears to be more of an opportunistic incident, compared to repeated bullying by peers at school which has a more relational element. Consequently, there are likely to be commonalities in the risk and protective factors which create a general *vulnerability* to victimisation, yet the *processes* and *pathways* involved may be specific to the young person, the different categories of extrafamilial victimisation, and the personal and environmental context. Without incorporating these elements and recognising individual processes and pathways to victimisation, it therefore seems unlikely that one model or theory of victimisation can be universally applied to all victims and victim experiences. As a result, vulnerability to victimisation and victimisation

processes appear to have thus far been treated as the same issue within this research literature.

Finkelhor et al. (2009b) have highlighted several predisposing pathways towards poly-victimisation. Cluster analysis revealed four distinct onset groups, characterised by risk relating to: dangerous communities; emotional or behavioural problems; family problems; or dangerous families *and* elevated symptoms. The majority of young people identified primarily with one of these pathways, yet a third of poly-victims could not be grouped into any of the four clusters. This suggests there are different pathways leading to poly-victimisation amongst the majority of young poly-victims, which highlights a difference in the significant vulnerabilities and victimisation processes involved. Consequently, the vulnerabilities and characteristics of the pathways leading to the same general outcome (i.e., poly-victimisation) may be different, despite some levels of overlap. These research findings also suggest that some young people do not follow one distinct pathway to poly-victimisation and other intervening factors may therefore need to be explored (Finkelhor et al., 2009b). Whilst this research refers to poly-victims, it is likely that similar findings would be found for the development of different types of victimisation, such as bullying or sexual assault.

Drawing parallels with the sexual offending research literature, a number of different theories developed to explain paedophilic behaviour and motives for offending have been accepted by researchers and practitioners (Hunter, Figueredo, Malamuth, & Becker, 2003; Veneziano & Veneziano, 2002). This recognises that the victim's age, developmental stage, and physical attributes will influence their vulnerability to sexual offenders in different ways and at different stages of their

development. By accounting for differences in the motivation of offenders, and therefore the different risk factors involved for the victims, knowledge about this form of offending has progressed. In return, more tailored interventions have been designed and implemented which are likely to have greater impact than a 'one size fits all' approach to paedophilia (see Saleh & Guidry, 2003).

Drawing upon these research findings helps to develop the overall argument presented within this thesis. This is that general vulnerabilities to victimisation may be similar across the spectrum of extrafamilial victimisation, yet specific vulnerabilities, processes and pathways leading to different types of victimisation (e.g., sexual victimisation), or differences in the extent of victimisation (e.g., poly-victimisation), are likely occur. As such, a number of elements from different theories of victimisation may be better utilised within one overarching framework of extrafamilial victimisation, which encompasses both vulnerabilities to victimisation and victim processes.

Figure 9 outlines a new integrated model of extrafamilial victimisation which incorporates the cyclical relationships between the vulnerabilities, mediating and moderating factors (i.e. processes), and the outcome of victimisation against young people. This is based on the research findings presented within studies one and two of this thesis, and by combining the principles of the different theories of extrafamilial victimisation. Additionally, the model is enhanced by drawing upon the findings from the wider research literature.

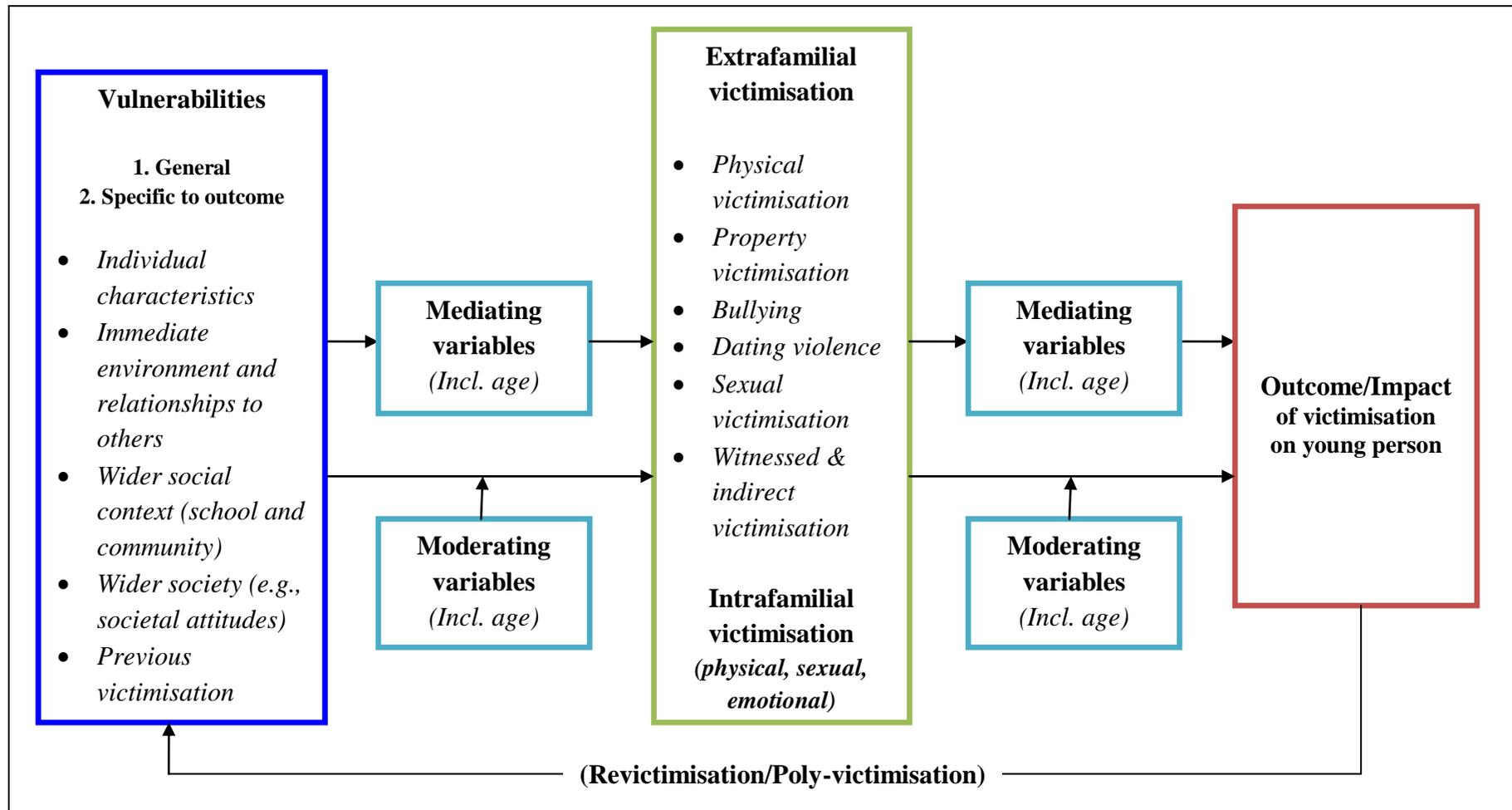


Figure 9. A new integrated model of extrafamilial victimisation which incorporates the cyclical relationships between the vulnerabilities, mediating and moderating factors, and the outcome of victimisation against young people.

7.3.4. A new model of extrafamilial victimisation.

The first step in this model (Figure 9) outlines factors which may create (1) a general vulnerability to victimisation (relating to the ‘target attractiveness’ aspect of the RAT), whilst recognising that there may be (2) specific vulnerabilities relating to specific outcomes/types of victimisation. The vulnerability factors recognised here operate across all levels of the young person’s ecology, thus incorporating the main premise of the ecological systems analysis model (Hong & Espelage, 2012).

The second step in the model acknowledges the interaction of mediating and moderating variables which may exacerbate or reduce the impact of vulnerabilities in their ability to predict victimisation. An example of this would be social factors and peer relationships, which were found in study one and study two to act as moderating factors and to influence the strength of the relationship between some predictors of victimisation and outcome. This step therefore accounts for the different processes and pathways which lead to the occurrence of different types/categories of victimisation based on initial vulnerabilities. Within the context of the RAT, this could refer to the young person’s level of guardianship which may facilitate victimisation in the presence of particular vulnerabilities. This could be applied to different types of victimisation in different locations, such as a street robbery whilst out alone at night, or sexual victimisation whilst alone in a house with a sexual offender. Equally, it may refer to a school culture where bullying is treated less seriously, and therefore a young person with vulnerabilities to bullying goes on to be victimised.

Steps one and two of this model may lead to extrafamilial victimisation and intrafamilial victimisation, entered as the third step in this model. These

victimisation classifications have been defined as separate outcomes within this model as they were treated as such throughout this thesis. However, it is recognised that the vulnerabilities and processes leading to extra- and intrafamilial victimisation may overlap or contrast. This is something which should therefore be explored in future research within the context of this integrated model.

Following initial exposure to victimisation, the young person is at risk of suffering negative outcomes as a result of their experiences (e.g., psychological trauma). This may be a direct result of victimisation, but is also likely to be influenced by mediating and moderating variables (i.e., processes). These processes are therefore reflected in the fourth stage of this model.

Finally, the arrow leading from outcome to vulnerabilities at the beginning of the model reflects the cyclical nature of victimisation. Victimization may impact on the young person in a way which may create vulnerabilities for re-victimisation and in extreme cases, poly-victimisation (e.g., internalising difficulties have been shown to act as risk factors for, and the outcome of, extrafamilial victimisation). As yet, the vulnerabilities and processes involved in the development of poly-victimisation are unclear, but it may be that the same factors are implemented as those involved in initial victimisation exposure.

Considered within all aspects of this model is the age of the young person which operates as a dynamic mediator or moderator at each step. This may influence the importance of different risk and protective factors, the influence of mediating and moderating variables, and the impact of extrafamilial victimisation on the young person.

By incorporating all of these elements of victimisation into one overarching, integrated model of extrafamilial victimisation, this reiterates the multidimensionality of extrafamilial victimisation. The implications of this model and the research findings presented within this thesis are drawn upon as the basis for the recommendations made in the proceeding sections. This is in relation to the development and implementation of preventative and reactive intervention, as well as the need for future research in this area.

7.4. Implications of the Research Findings for Practice

7.4.1. Preventing extrafamilial victimisation.

Effective intervention programmes when dealing with extrafamilial victimisation need to be based on strong empirical research findings. At present the programmes aimed at preventing extrafamilial victimisation tend to be school-based and focus on specific areas such as; improving knowledge of victimisation, changing aggressive behaviour, changing attitudes towards bullying and bystander behaviour, and improving social and emotional skills in vulnerable young people (Merrell, Gueldner, Ross, & Isava, 2008; Mytton, DiGuseppi, Gough, Taylor, & Logan, 2009; Mytton, DiGuseppi, Gough, Taylor, & Logan, 2002; Polanin, Espelage, & Pigott, 2012; Vreeman & Carroll, 2007; Zwi et al., 2007). However, the findings from a number of systematic reviews in this area (see the above references) suggest that the effectiveness of these programmes are mixed and further efforts are therefore needed to work towards keeping children safe.

It has been suggested that many of the risk factors for victimisation, such as family dysfunction, risk taking, child emotional difficulties, and neighbourhood

problems, are difficult issues to change (Finkelhor, 2008). Nevertheless, efforts should be made to protect children and young people and the current research highlights a number of areas which may be amenable to intervention. Many of the risk and vulnerability factors identified within this thesis overlap with the vulnerability and target areas of current English government interventions aimed at improving general outcomes for children and families. These include the programmes outlined within the 'Social Justice: Transforming Lives' publication (HM Government, 2012), and the 'Troubled Families Programme' (Department for Communities and Local Government, 2012, p. 9). There is therefore a framework in which extrafamilial victimisation could be tackled amongst young people in England, should the focus of these programmes be expanded to focus on extrafamilial victimisation as an outcome.

Turner et al. (2011) recommend that approaches to prevention should include the school and the community and not focus on only one area of the young person's ecology. In this sense, they promote a child-centred approach to intervention which is supported by the findings from the current research. Indeed, a multifaceted approach towards intervention has been recommended in relation to school and community-based interventions (Kochenderfer-Ladd et al., 2009; Sieger, Rojas-Vilches, McKinney, & Renk, 2004). Reviews of the intervention programmes in this area note the necessity of providing multiple disciplines and complementary components throughout intervention, adopting a whole-school approach (Vreeman & Carroll, 2007), or a community-wide focus which also includes individual support and guidance (Sieger et al., 2004); altering context without changing individual factors, and vice versa, is said to be limiting (Vézina & Hébert, 2007).

Bullying and extrafamilial victimisation does not start and stop at the school gates and the current research findings reveal that 44% of young people are victimised in school *and* community environments (see chapter 4, section 4.5.). Additionally, certain types of victimisation, such as bullying, occur relatively equally in (51.4%) and out (55.4%) of school (see chapter 4, section 4.5.) and over a third (36.6%) of the bullying incidents occurring in the community took place on the journey to/from school (chapter 4, section 4.5.). Taken together, these findings suggest a level of overlap between extrafamilial victimisation experienced in different locations. As victimisation experienced in multiple locations appears to have a significantly greater detrimental impact on the young person (chapter 4, section 4.12.4.), there is therefore a need to adopt a multi-agency approach to prevention and intervention and holistically address victimisation in all locations.

Whilst a holistic, multi-agency approach would be ideal in terms of prevention, it may be argued that schools do not have the resources to deal with victimisation in the community and it may not be seen as the police's responsibility to intervene in 'less serious' school-based incidents. However, involvement in these areas from both parties, as well as effective communication between the two, would be likely to stop many incidents carrying on in, and spilling over into, the school or the community. As such, multi-agency partnerships, such as the Safer School Partnerships (SSPs; see Bowles et al., 2005), are vital in addressing victimisation within all locations and helping to identify pupils at risk. Maximising these interventions would help to prevent the occurrence of victimisation in both the school and community environments (as documented in evaluation reports of the SSP; Bhabra et al., 2004; Bowles et al., 2005) and thereby reduce the impact

extrafamilial victimisation can have on the young person. This programme should therefore be utilised to its full potential to improve the safeguarding of young people, and its benefits should be promoted to funding bodies to encourage prolonged financial backing.

It is also important that vulnerable children and young people are identified and targeted through intervention as early as possible. In particular, those young people who have already been identified warrant specific attention given the risk this appears to create for re-victimisation. Again, multi-agency approaches to intervention, such as the SSP, have the potential to achieve this by bringing together a number of agencies that have insight into a young person's home life (e.g., child protection specialists/ social workers), community activities/experiences (e.g., the police), and school experiences (e.g., school personnel). Information sharing across these services can therefore help to identify those young people most at risk who have come to their attention due to difficulties or experiences within one of these settings. This would allow professionals within other settings to be aware of the young person's needs and to devise an appropriate safeguarding response.

The findings from the current research suggest that intervention may be most effective when it is tailored to the current environment and the type/category of victimisation it is aiming to address. For example, chapter 4 identified more discrete forms of victimisation within indoor locations such as classrooms and people's houses, whilst more overt, interpersonal forms of victimisation were identified in outdoor locations where supervision was likely to be weaker. Findings presented within chapter 4 also suggested that the geographical pattern of extrafamilial victimisation may be specific to each school and therefore an understanding of the

environment surrounding the school and the movement of the pupils within it is required on an individual level. Such differences in the prevalence and characteristics of victimisation according to the environmental and personal context of the young person therefore need to be considered when designing and planning intervention to prevent extrafamilial victimisation. Therefore, general strategies to increase a young person's resilience to risk may be useful to improve general outcomes for young people, but specific strategies may also be required to address a particular outcome.

Ideally, universal prevention and intervention programmes would be rolled out to target all children and prevent victimisation in all areas and locations. One of the most obvious forms of intervention at this level would be education on victimisation and bullying/offending, and healthy and respectful intimate/peer relationships, which could occur within the school environment. Indeed, many of the systematic reviews of interventions in this area show how preventative efforts, particularly within schools, are effective in increasing knowledge and understanding of victimisation (Merrell et al., 2008; Zwi et al., 2007). However, it is as yet unknown how much an increase in knowledge will influence a change in behaviour. With scarce funding resources however, we need to use research to help us identify those young people who are the most vulnerable to victimisation and to target risk and protective factors that are as universal to victimisation in general (and not just one specific type) as much as possible. Follow-up interventions with young people who appear to be specifically vulnerable to victimisation may then be needed. This is a common public health approach adopted in other areas of intervention, such as the prevention of child maltreatment (see, for example, the implementation of the

nurse-family partnership in the UK; Allen, 2011). Models of extrafamilial victimisation, such as the one proposed in Figure 9, could therefore aid this process by helping to identify common vulnerabilities and intervening variables for victimisation, whilst also outlining factors relevant to specific outcomes.

7.4.2. Addressing the impact of extrafamilial victimisation.

It is important that any negative effects of extrafamilial victimisation are dealt with to reduce its impact on the young person and to reduce their likelihood of revictimisation. However, extrafamilial victimisation is a multidimensional issue and it should therefore be viewed and treated as a complex phenomenon in order to tackle the issue in a timely, effective manner. Clinical settings therefore need to focus on the spectrum of extrafamilial victimisation and not just deal with the presenting issue, as victimisation is rarely an isolated, one-off incident. The importance of the environmental and personal context surrounding victimisation should not be ignored and a thorough, comprehensive assessment of the young person and their victim experiences should therefore take place. This should include the range of victimisation experiences the young person has been exposed to, the characteristics of their victimisation, and when and where they have been victimised.

Intervention programmes should be developed to address these factors based on what we currently know about how they influence the outcomes of victimisation from the current research literature in this area. Additionally, the importance of mediating and moderating factors should be recognised and explored during assessment. The young person's living and social environment (their exosystem);

their relationship with family and peers (microsystem); the interaction between microsystems (mesosystem); and the wider cultural and social beliefs in which the young person is embedded (macrosystem), should therefore be considered.

Additionally, the young person's age and developmental level (chronosystem) should also be recognised for the impact this is likely to have on outcome. This is in line with the ecological systems analysis model of extrafamilial victimisation (Hong & Espelage, 2012). The consideration of factors on all of these levels will allow the clinician to develop a holistic picture of the young person, their experiences, and their risk or protective factors. In turn, this will lead to the development of a holistic and personalised response.

7.5. Directions for Future Research

Overall, the findings from this study highlight the need for further research into the prevalence, characteristics and impact of extrafamilial victimisation on young people, particularly within the UK. The definition of victimisation used is important within this research and academics should aim to explore a holistic, well-defined range of victim experiences, using standardised definitions (where possible), and clearly defined time periods. It is also important that researchers recognise the role of gender on the prevalence and characteristics of extrafamilial victimisation. An important direction for future research would be to develop cohort studies which follow young people from birth to adolescence in order to prospectively explore their victim experiences.

Further comprehensive research into the full spectrum of extrafamilial victimisation is needed. Limited studies were identified for this review which

focussed on ‘conventional crime’, sexual victimisation, and ‘criminal’ victimisation. Specifically, changes in the ways in which young people are victimised through developments in technology, such as the increase in cybervictimisation, should be given more attention in future research.

The findings from the current research suggest that we need to know more about the young people who experience extrafamilial victimisation outside of the family to understand their vulnerabilities and the processes involved in the development and continuation of victimisation. A greater understanding of the characteristics of poly-victims and the processes involved in the development of poly-victimisation is important. Particularly, whether serious victimisation comes first in creating a vulnerability to poly-victimisation, or whether this is the consequence of a developing pattern of victimisation increasing in frequency and seriousness. Longitudinal research is needed to explore this issue along the lines of that carried out by Finkelhor et al. (2009b). It is also important to know whether certain types of young people are more likely to be victimised in more than one location than others.

Additionally, the relationship between victimisation in the school and community appears to be complex and further research investigating victimisation in these settings, and the interaction between the two, is needed. We need to know more about how, when and why incidents occurring within the school spill over into the community and vice versa. Doing so will help develop multi-agency approaches to intervention to help identify young people at risk and prevent this from occurring. The journey home from school and the time period immediately following school provides an obvious link between school and community-based victimisation and

further exploration of this area should be carried out. Research findings from the USA have found this time period after school to be an important time for the victimisation of young people (Soulé et al., 2008; Snyder & Sickmund, 2006) and it should therefore be explored as to whether it holds the same significance for young people in the UK. If so, the factors which make victimisation more likely at this time should be explored.

In study one, the extent of victimisation found to occur within the community highlights the importance of knowing more about how to respond to these issues and how best to prevent it from occurring. Future research should therefore look closer at the specific locations in which young people are victimised to help inform policing and supervision efforts on a local level. The findings from study one show how geographical hotspot analysis can be productive in identifying local victimisation hotspots within the area surrounding a school. Surveys and mapping analysis on a larger scale are therefore needed to gain a more comprehensive understanding of the location and distribution of extrafamilial victimisation. This could be used to inform policing strategies in terms of geographical 'hotspot' policing and future research should investigate the utility and effectiveness of this in preventing youth crime and victimisation.

Recent research findings have highlighted the reciprocal nature of the relationship between the risk factors for, and the outcome of, extrafamilial victimisation (e.g., Reijntjes et al., 2012). Indeed, the findings of the systematic review carried out within study two of this thesis revealed how internalising problems were a significant predictor of victimisation. Previously, the findings from study one suggested this to be a significant outcome of victimisation (although

temporal causality could not be determined), influenced by a number of factors relating to the characteristic of the young person's victim experiences. Risk and outcome may therefore need to be viewed interchangeably and this should be determined by future research in this area. Study one also found the relationship between victimisation and the outcome of victimisation on psychological well-being to be moderated by social support. Similarly, the findings from the research synthesised in the systematic review (study two) found peer relationships to moderate the impact of internalising problems as risk factors for victimisation. The same mediating and moderating factors, and protective and resilience factors, may therefore be implicated in the relationship between risk and victimisation, and victimisation and outcome. This suggests a complex cycle of cause and effect and understanding more about these relationships within future research may help to develop more effective, comprehensive intervention to reduce the likelihood of victimisation, re-victimisation and psychological distress.

Finally, future research in this area should place greater emphasis on exploring extrafamilial victimisation from the perspective of the offender. So far, the majority of the literature in this area focuses on the victim and how their characteristics, behaviours or activities may increase or reduce their risk of being victimised in the school and community environments. Offenders/perpetrators need to be recognised as a significant part of this occurrence, as suggested by the RAT of extrafamilial victimisation. This is because they play an integral role in these experiences. It is therefore important that more research is carried out in this area to remove the focus and the possibility of blame on the victim.

7.6. Conclusion

The two studies presented within this thesis provide a comprehensive insight into the prevalence, characteristics, and impact of extrafamilial victimisation amongst a sample of English young people. They also reveal the complexity of the network of risk and protective factors, along with mediating and moderating variables, which may lead to the occurrence of extrafamilial victimisation amongst children and young people. In doing so, extrafamilial victimisation is revealed to be a complex, multidimensional phenomenon which requires a multifaceted approach in regards to prevention and intervention. The findings from this research have been explored within the context of the routine activities theory and ecological theory of extrafamilial victimisation. As such, our understanding of this issue has been enhanced and the research findings have been applied to provide support for these theories. The thesis concludes by drawing upon the research findings and theories outlined within the extrafamilial victimisation literature to propose a new model of extrafamilial victimisation. This model takes account of the different vulnerabilities and processes involved in victimisation, as well as recognising the reciprocal relationship between predictors and outcome. As such, recommendations for the development of prevention and intervention are outlined, as is the need for future research in this area.

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Appendices

Appendix 1. Search terms used to identify the literature for the thesis.

Theories:

(‘child*’ OR ‘young’) AND (‘theor*’) AND (‘victim*’)

Prevalence:

(‘child*’ OR ‘young’) AND (‘prevalence’ OR ‘extent’) AND (‘victim*’ OR
‘bully*’ OR ‘violen*’)

Geography and hotspot:

(‘child*’ OR ‘young’) AND ‘hotspot’ AND (‘victim*’ OR ‘bully*’ OR
‘violen*’)

(‘child*’ OR ‘young’) AND (‘geograph*’ OR ‘location’ OR ‘place’) AND
(‘victim*’ OR ‘bully*’ OR ‘violen*’)

Routine activities:

(‘child*’ OR ‘young’) AND (‘routine activities’) AND (‘victim*’ OR
‘bully*’ OR ‘violen*’)

School impact:

(‘child*’ OR ‘young’) AND (‘school’) AND (‘victim*’ OR ‘bully*’ OR
‘violen*’)

Impact on psychological well-being:

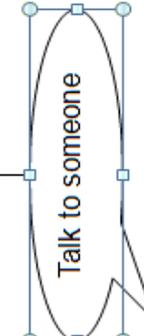
(‘child*’ OR ‘young’) AND (‘psych*’ OR ‘well-being’ OR ‘mental’) AND
(‘victim*’ OR ‘bully*’ OR ‘violen*’)

Risk and protective factors:

(‘child*’ OR ‘young’) AND (‘risk’ OR ‘protect*’ OR ‘predict*’) AND
(‘victim*’ OR ‘bully*’ OR ‘violen*’)

Databases searched: Scopus, Web of Science, PsycInfo, and Google Scholar, within which the title, abstract and keywords were searched. The first 200 hundred hits from each database were explored to see if they were relevant to the thesis.

Appendix 2. Help Booklet

<h1>Getting help</h1>   <p>It is really important that you tell somebody if something bad has happened to you or to someone you know. This could be a friend, teacher, parent/carer or someone you trust.</p> <p>By telling someone, you can get help dealing with what has happened and can help to put a stop to something that is still happening to you. You can also help stop it happening again to you or to someone else.</p> <p>If you do not feel you can tell a friend, teacher or your parents/carers, there are other people you can talk to. This booklet gives you information about general help services available to you, and also the services that are available where you live.</p> <p>There is also information on how to report crimes and incidents to the police and to other people.</p>	<p>There are many ways you can use these services and get help;</p> <ul style="list-style-type: none"> Call themVisit their website for information E-mail themVisit them in person 
--	---

General help services in England

Childline

Type of service: General help service
Helpline: 0800 1111
Web address: <http://www.childline.org.uk>
E-mail: e-mail them or chat to others by going on their website



Get connected

Type of service: General
Helpline: 0808 808 4994
Web address: <http://www.getconnected.org.uk/>
E-mail address: help@getconnected.org.uk
Other services: Online chat service

Samaritans

Type of service: General
Helpline: 08457 90 90 90

Muslim Women's Helpline (Muslim women and girls in crisis)

Type of service: General help for Muslim women and girls
Helpline: 020 8904 8193 / 020 8908 6715

Connexions

Type of service: General
Helpline: 080 800 13219
Web address: <http://www.connexions-direct.com>
E-mail: e-mail them or chat to others by going on their website

Are you ok?

Type of service: Service for Victims or witnesses of crime
Web address: <http://www.are-you-ok.org.uk/>

CyberMentors

Type of service: Beatbullying project
Web address: <http://cybermentors.org.uk>

Bullying UK

Type of service: Help for bullying
Web address: <http://www.bullying.co.uk/>
E-mail address: help@bullying.co.uk



Kidscape

Type of service: Bullying
Helpline: 0845 205 204
Web address: <http://www.kidscape.org.uk>

Relate

Type of service: Help for relationship problems
Helpline: 0300 100 1234
Web address: www.relate.org.uk
E-mail address: info@relate.org.uk

The hideout

Type of service: Relationships
Web address: <http://www.thehideout.org.uk>

24 hour national domestic violence helpline

Type of service: Relationships help for women and children
Helpline: 0808 2000 247

Respect4us

Type of service: Interactive and informative website about issues including domestic violence, sexual bullying and sexual discrimination
Web address: <http://www.respect4us.org.uk/>

Broken Rainbow

Type of service: Support for lesbian, gay, bisexual and transgender (LGBT) people experiencing relationship violence.
Helpline: 0300 999 5428
Web address: <http://www.broken-rainbow.org.uk/index.html>

Warwickshire anti-bullying partnership

Type of service: Help for bullying
Helpline: Text2Talk 07786 200 999
E-mail address: bullying@warwickshire.gov.uk

Warwickshire Domestic Violence Support Services

Type of service: Help for relationship problems
Helpline: 01788 537112
Web address: <http://www.wdvss.org.uk/>
E-mail address: outreach@warksdvss.org.uk

Warwickshire Against Domestic Abuse

Type of service: Relationships
Helpline: 0800 408 1552

Rugby Survivors of Rape and Sexual Abuse

Type of service: Help for Sexual violence
Helpline: 01788 551151
Web address: <http://www.survivorguide.co.uk/>
E-mail address: rosa.support@btconnect.com

Women for change

Type of service: Help for sexual violence (for females only)
Helpline: 01789 490715
Web address: www.womenforchange.org.uk
E-mail address: info@womenforchange.org.uk

Coventry Rape & Sexual Abuse Centre

Type of service: Help for Sexual violence
Helpline: 024 7627 7777
Web address: www.crasac.org.uk
E-mail address: info@crasac.org.uk



EACH (Educational action challenging homophobia)

Type of service: Reporting and getting help from homophobic bullying
Helpline: 0808 1000 143
Web address: <http://www.eachaction.org.uk>
E-mail address: Use online e-mail reporting form

Young minds

Type of service: Help with mental health problems
Web address: <http://www.youngminds.org.uk/young-people>

Barnardo's Safe4U project

Type of service: Young runaway project
Helpline: 0808 800 7070
E-mail address: safe4u@barnardos.org.uk

ThinkUknow

Type of service: Help for online abuse
Web address: www.thinkuknow.co.uk
E-mail address: Use online e-mail reporting form

Warwickshire help services

The Zone

Type of service: Lots of information on help services and how to report crime
Web address: <http://www.thewarwickshirezone.co.uk>

Warwickshire Victim support

Type of service: Victim or witness of crime
Helpline: 01926 336474
Web address: www.victimsupport.org.uk
Area contact details:
Coventry Mid Warwickshire North Warwickshire
024 7625 6956 01926 336474 024 7635 1003
Rugby Stratford & South Warwickshire
01788 537977 01789 266626

Safeline

Type of service: Help for Sexual violence
Helpline: 0808 800 5005
Web address: www.safelinewarwick.co.uk
E-mail address: office@safelinewarwick.co.uk
Office address: 3 Trinity Mews, Priory Road, Warwick,
Warwickshire, CV34 4NA. 01926 408315

Connexions, Coventry and Warwickshire

Type of service: General help service
Helpline: 024 7670 7400
Web address: <http://www.cwconnexions.org.uk/>
E-mail address: info@iyss.org.uk
Office address:
Main Administrative Office
1st Floor, Tower Court, [Coleshill](http://www.cwconnexions.org.uk/) Enterprise Park, [Courtauld's Way](http://www.cwconnexions.org.uk/)
Coventry, CV6 5QT
024 7670 7400

Stratford Connexions Office
4 Mansell Street, Stratford-upon-Avon, CV37 6NR
01789 296 362

Leamington One Stop
Marlborough House, Holly Walk, Leamington Spa, CV32 4XP
01926 468 950

Rugby One Stop
20 Regent Place, Rugby, CV21 2PN
01788 577154

Nuneaton One Stop
43-44 Abbey Street, Nuneaton, CV11 5BT
02 7632 4620

Bedworth Connexions Office
Topps House, 101-103 Park Road, Bedworth, CV12 8LB
02476312846

Atherstone Connexions Office

58 Long Street, [Atherstone](http://www.cwconnexions.org.uk/), CV9 1AU
01827 712482

Coleshill Connexions Office

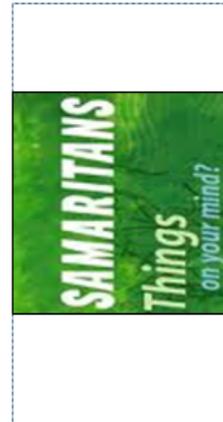
19 Parkfield Road, [Coleshill](http://www.cwconnexions.org.uk/), B46 3LD
01675 462245

Samaritans, Warwickshire

Type of service: General help service
Helpline: 08457 90 90 90
Web address: www.samaritans.org
E-mail address: jo@samaritans.org
Office address:
Stratford-Upon-Avon
1 Shakespeare Street, Stratford upon Avon, Warwickshire, CV37
6RN
01789 298866

Coventry & District
57 Moor Street, [Earlsdon](http://www.samaritans.org/), Coventry, West Midlands, CV5 6ER
02476 678678

Tamworth
The Phillip Dix Centre, Corporation Street, Tamworth, Stafford-
shire
B79 7DN
01827 709637 or 709638



Warwickshire crime reporting services

Reporting crime to the police in Warwickshire

Helpline: 01926 415000

Web address: For the contact details of specific police stations in Warwickshire, visit

<http://www.warwickshire.police.uk/contactingthepolice/policestations/index.html>

Warwickshire Crimestoppers

Type of service: Anonymous way to report crime.

Helpline: 0800 555 111

Web address: <http://www.crimestoppers-uk.org/>

E-mail address: Use online report form to report crime confidentially

RSPCA

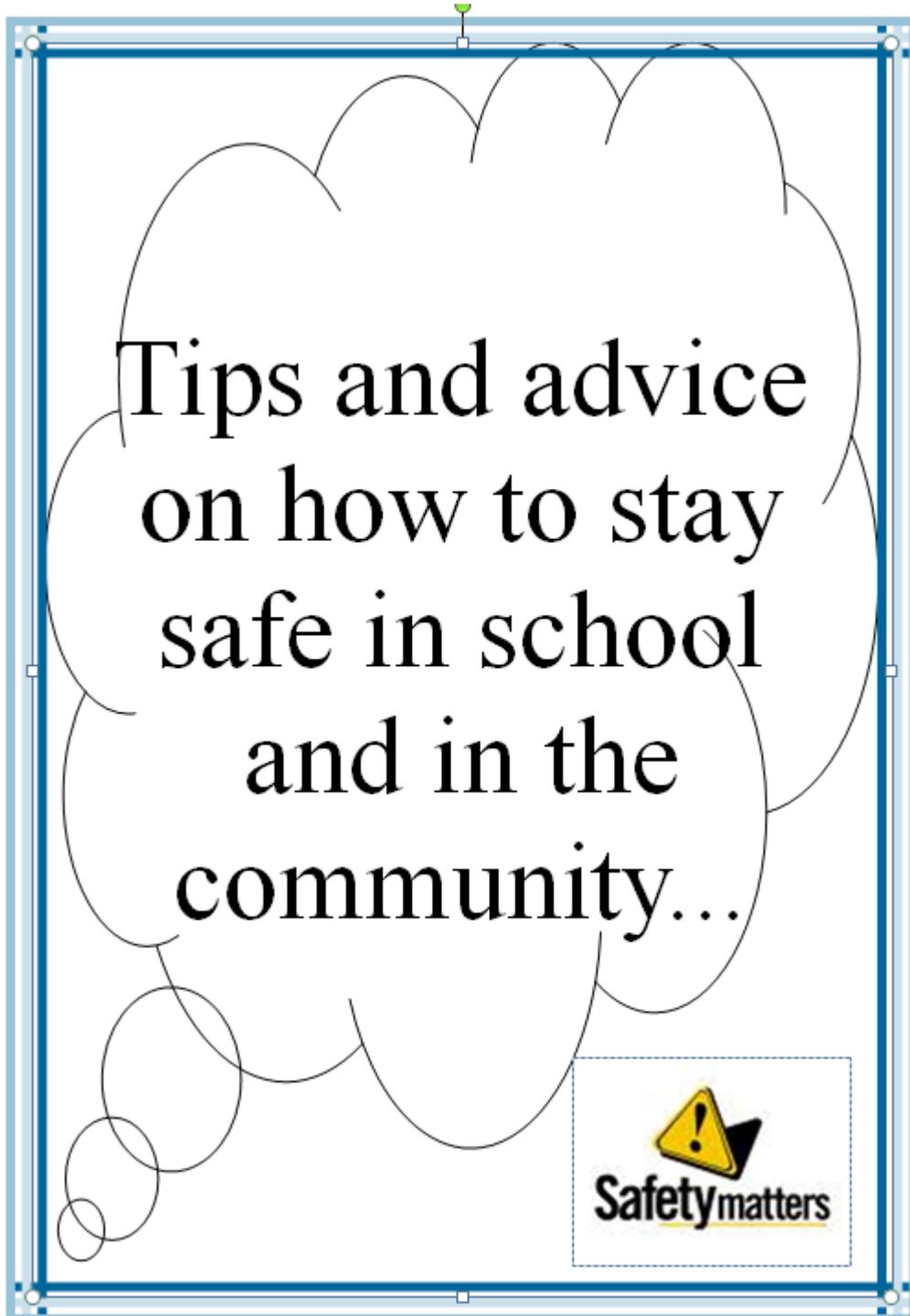
Type of service: Reporting cruelty to animals

Helpline: 0300 1234 999

Web address: www.rspca.org.uk

In an emergency, always dial 999





Staying safe on the streets

- Look confident, be alert, hold your head up and be aware of your surroundings, even in areas that you know very well.
- Think about your route. Where would be a safe place to go if something went wrong? Safe places might be busy places like shops or garages, friends' houses or a police station.
- Whenever it's possible, try and walk home with someone else or a group of friends. You're less likely to be attacked or mugged if you're with more than one person.
- It's not a good idea to listen to music through your headphones. As well as being distracting, it's showing that you have something that's worthwhile stealing. Make sure you keep any valuables tucked safely away in your bag. If you do listen to music whilst on the move, carry your MP3 player in an inside pocket and make sure your headphone wires are hidden beneath your clothes.
- Make sure you stay on roads that are well lit and that are quite busy. This will make it easier to see anyone who may be approaching you.
- It's often tempting to take a shortcut through the park or down an alleyway. However, a lot of attacks happen in these areas so don't take an unnecessary risk just to cut your journey time by a few minutes.



- If you do have to pass danger spots, think about what you would do if you felt threatened. The best idea is to head for a public place where you know there will be other people, for example a garage or shop.
- Take the route you know best and stick to well-lit, busy streets. Make sure your parents/carers know the route you take.
- Walk in the middle of the pavement, facing oncoming traffic.
- If you do think you're being followed, cross the road or go into a shop.
- Trust your instincts – if you have a 'funny feeling' about someone or something, don't ignore it, act on it straight away.
- Never accept a lift with a stranger or someone you don't know very well.
- Have your keys ready so you can get into your home quickly.
- If there is going to be someone at home, why not let them know that you are on your way and what time to expect you?
- Carrying a personal alarm can also make you feel a lot safer. If you activate it, the alarm will give off a high-pitched sound that can shock anyone that's attacking you.

Staying safe online

- Never tell anyone any personal things about yourself or your family, like your address, phone number or the name of your school. If you are writing a blog, be careful what you write in it. Don't give away too many details about yourself.
- Keep your passwords private and don't tell anyone, not even your best friend.
- Don't post any photos or videos that you wouldn't be happy for your parents or teacher to see. Once they are up online they can be copied and posted in other places where you can't get rid of them.
- Make sure you know who to contact to report abuse or bullying on your page and how your complaint will be dealt with.
- Install the new CEOP app to Facebook for advice and help if you are worried online or want to report something.

Is it ok to meet someone I have chatted to online?

It is not a good idea to arrange to meet people that you have chatted to online, as you can never be sure if they are who they say they are.

If you do decide to meet up with them, tell someone you trust, such as a parent or a friend, that you want to do this. Arrange to meet in a public place and take a trusted adult or friend with you.

Staying safe on public transport

- When you get on a bus, try to sit downstairs as it's easier to alert the driver if something happens that makes you uncomfortable.
- If you can, sit in a seat next to the aisle so you can move seats easily if you want to.
- If you are travelling by train, choose a carriage with people already in it. Also, look out for where the emergency alarms are. If you get into trouble, don't be afraid to use them.
- If you feel uncomfortable on a train, change carriages and move closer to the guard or driver.
- Carry extra money in case you get stranded and need to take another bus or train.
- Try to get someone to meet you if you are going to be alone when you get off at the bus stop or train station.



Protecting yourself outside of school if you are being bullied

- Keep a record – and save any nasty texts or emails that you have been sent.
- Ask your mates to look out for you.
- Try not to fight back – you could get into trouble or get hurt.
- Try and avoid the areas where the bullies are and where the bullying normally happens.
- Keep to well-lit areas and busy areas, and try to avoid being alone.
- If the bullying is happening on the way to and from school:
 - Plan a different route to try and avoid the places where it happens
 - Take a safety alarm with you – they are not expensive and create a loud noise which can attract help and put bullies off
 - Walk with friends, or older brothers and sisters if possible
 - If you are being bullied on a bus, sit downstairs rather than on the top deck and tell the driver about what is happening. If it's a school bus then you can talk to your teacher – they are responsible for you while on a school bus and can make the bullying stop
 - Keep a diary of what is happening with dates and times.
 - If the people bullying you go to the same school as you, it is a good idea to let the school know what is happening, no matter where or when it is they are bullying you. They may not be able to take action about incidents that happen in the evenings or at weekends, but they can make sure it doesn't happen in school.

Keeping your mobile phone safe

- Keep your phone with you at all times. If you are worried about someone taking it at school or if you are out, leave it at home.
- Only give your mobile number to your friends and people that you trust.
- Don't lend your phone to someone you don't know or trust, or put it in a place where other people could get hold of it.
- Thieves are opportunists, so don't make yourself an easy target by showing off the handset you're carrying around.
- If you're out with your friends, don't put your phone on a table as anyone walking by can easily run off with it.
- If your phone is lost or stolen, report it immediately to the police. You should also contact your network provider. When you get through, tell them your phone has been stolen. They'll be able to block both the handset and the SIM card so that they can't be used any more.

Protecting your bike

- Keep your bike safe in the same way as you would protect a car. Always lock it up when you leave it unattended.
- Buy a strong and reliable lock that you can use to secure your bike to a fence.
- You can also mark the frame of your bike with an ultraviolet marker to increase the chances of recovering your bike if it is stolen.

What to do if you feel threatened

- If a situation makes you feel uneasy you should try to get away at once.
- Always give away your bag, purse or wallet rather than fighting. Your things can be replaced – you can't.
- Your voice is one of your best forms of defence. Don't be embarrassed to make as much noise as possible to attract attention. Yell at the top of your voice, giving a specific instruction like "Phone the Police!"
- If you are on a bus or train you can press the alarm. Train platforms have telephones situated at the Help Points – it will connect you immediately to the British Transport Police or station staff.
- You could also phone 999.



Personal safety alarms

- The purpose of a Personal Safety Alarm is to shock and disorientate an attacker, giving you vital seconds to get away.
- To have the biggest effect, the alarm is best activated close to the attacker's ear.
- Once you have set off your alarm, leave the situation as quickly as you can, moving to a busy area if possible.
- Remember that a personal alarm should be just one part of your personal safety plan.

For more information on how to protect yourself in school and in the community, there are a number of websites you can visit:

Childline

<http://www.childline.org.uk/explore/Pages/Explore.aspx>

Home Office

http://www.direct.gov.uk/en/YoungPeople/CrimeAndJustice/KeepingSafe/DG_10027713

Sustrans (for advice on staying safe on your journey to and from school)

http://www.sustrans.org.uk/assets/files/Safe%20Routes/resources/infosheets/SRS_Staying_Safe_FS02.pdf

Suzu Lamplugh trust

<http://www.suzylamplugh.org/personal-safety/personal-safety-tips>



Appendix 4. Demographic Questionnaire

Please answer the following questions.
Where there is more than 1 option, please circle the word that best describes you or your situation. Try and answer every question.
If you do not understand any of the questions, please put your hand up.

Ⓐ How old are you?

Ⓐ Are you (please circle one): Male Female

Ⓐ What is your ethnicity? White Black Asian Mixed Other.....

Ⓐ Do you, or would you, be able to get a free school lunch? Yes No Don't know

Ⓐ Do you have a disability? No Yes (Please describe your disability?).....

How much do these statements sound like you? (please circle an answer)

Ⓐ I have lots of friends:
Very much like me Quite like me Not really like me Not at all like me

Ⓐ I have one or more friends that I can rely on when I need them:
Very much like me Quite like me Not really like me Not at all like me

Ⓐ I like everyone I know: Very much like me Not at all like me

Ⓐ Do you have one or more 'best friends'? Yes No

Ⓐ Are your friends ever in trouble with the police? Yes Sometimes No

Ⓐ Please circle who you live with (you can circle more than 1): Birth mum Birth dad
Step-mum Step-dad Adoptive parents Foster carers Brothers or sisters
Grandparents or other family members Other significant adult (e.g. neighbour, family friend)
Other person (who?).....

Ⓐ How well do you get on with the people you live with?
Really well Quite well OK Not very well Really bad

Ⓐ How would you describe your relationship with your parents?
Really good Good OK Not very good Really bad

Ⓐ Do your parents ever get angry at you? Yes No

Ⓐ Are the adults you live with normally at home when you get home from school?
Always Most of the time Sometimes Not very often Never

Ⓐ How many nights a week do you usually go out with friends after school? 1 2 3 4 5

Ⓐ Do you normally see your friends on a weekend? Yes Sometimes No

➔

Where do you normally go with friends (you can circle more than 1)? Friends house
 Outdoor recreational area (e.g. park, field etc) Indoor recreational area (e.g. cinema, bowling)
 Your house Other (where?).....

Do the adults you live with know where you go in the evening after school?
 Always Most of the time Sometimes Not very often Never

Do the adults you live with ask where you go in the evening after school?
 Always Most of the time Sometimes Not very often Never

How often do you drink alcohol with your friends? Never Once Sometimes on a weekend
 Sometimes during the week Every weekend Every week

How safe do you feel in school? Very safe Quite safe Not very safe Not at all safe

How safe do you feel on your way to and from school?
 Very safe Quite safe Not very safe Not at all safe

How safe do you feel out of school? Very safe Quite safe Not very safe Not at all safe

Do you ever worry about anything? Yes No

Do you always tell the truth? Yes No

Have you ever taken anything that did not belong to you? Yes No

Have you ever been in trouble with the police and:

Received a reprimand from the police? Yes No

Received a final warning from the police? Yes No

Been kept in custody at a police station? Yes No

Been before a youth offender panel? Yes No

Been contacted by a youth offending team? Yes No

Been sent to court? Yes No

Been convicted of a crime? Yes No

If you have been in trouble with the police, please tell us how old you were when this happened. If it has happened more than 1 time, please say how old you were when it first happened and how old you were when it last happened.
 Age..... (OR) Age when it first happened..... Age when it last happened.....

If you have been in trouble with the police, what was this for (you can circle more than 1)?
 Drugs Antisocial behaviour Possession of an offensive weapon Violent offence
 Theft/Burglary/ Robbery Motoring offence Sexual offence Arson
 Criminal damage Fraud/Forgery Public order offences Animal cruelty
 Other (please name).....

Appendix 5. Extrafamilial Victimisation Defined and Organised Into Modules, Categories, and Types

Module	Category	Type	Definition
Conventional crime	Property victimisation	Robbery	Had something taken from them by force
		Personal theft	Had something stolen from them
		Vandalism	Had something of theirs broken or ruined
	Physical victimisation	Assault	Been hit, kicked or attacked on purpose
		Kidnapping	Made to go somewhere by someone who they thought might hurt them
		Bias attack	Hit, kicked or attacked because of their skin colour, religion, where their family comes from, physical problem or sexuality
Peer victimisation	Bullying	Physical bullying	Been picked on by being chased, had someone grabbing their hair or clothes or being made to do something they did not want to do
		Emotional bullying	Been called names, people said hurtful things to them or said they did not want them to be around
		Internet harassment	Been bothered, harassed or had mean words, pictures or videos spread about them on the internet or mobile phone
	Dating victimisation	Dating physical violence	Pushed, slapped, hit or kicked by a boyfriend/girlfriend or a date
		Dating emotional violence	Been called names, had hurtful things said to them, or been threatened, controlled or intimidated by a boyfriend/girlfriend or a date
	Sexual victimisation	Sexual victimisation	Internet sexual harassment
Contact sexual assault			Someone has touched their private parts when they did not want it or had someone touch their private parts
Flashing/sexual exposure			Been made to look at someone else's private parts by force or flashing

Witnessing/ indirect victimisation	Witnessing/ indirect victimisation	Burglary	Had something stolen from their house which belonged to their family or someone they lived with
		Witnessed theft	Witnessed someone having something stolen from them
		Witnessed vandalism	Witnessed someone having something of theirs broken or ruined
		Witnessed physical bullying	Witnessed someone being picked on by being chased, having someone grab their hair or clothes or being made to do something they did not want to do
		Witnessed emotional bullying	Witnessed someone being called names, having people say hurtful things to them or said they did not want them to be around
		Witnessed assault	Witnessed someone being hit, kicked or attacked on purpose
		Witnessed robbery	Witnessed someone having something taken from them by force
		Witnessed animal cruelty	Witnessed someone hurt an animal on purpose
		Witnessed contact sexual assault	Witnessed someone being made to touch someone else's private parts when they did not want it or had someone touch their private parts
		Witnessed kidnap	Witnessed someone being made to go somewhere by someone who they thought might hurt them

Appendix 6. Adapted Juvenile Victimization Questionnaire (JVQ)

This booklet asks you questions about some bad things you may have experienced or witnessed in your life so far. These are things that have HAPPENED TO YOU or that you have SEEN happen to someone else in real life. Not things you have watched on TV or in a film, or things that you have only heard about.

We would only like you to tell us about things that you have experienced or witnessed that were done by people outside of your family. Please do NOT tell us about things that were done by people in your family.

Please follow these instructions:

On every page there is one question inside a grey box, and then a number of questions below the box.

Answer all of the questions in the grey boxes by ticking 'Yes' or 'No'.

If you answer 'Yes' to a question in a grey box, please answer the questions below the box on the same page.

If you answer 'No' to a question in a grey box please move on to the question in the next grey box .

To answer the questions below the grey boxes, please circle the word that best describes the situation, or by writing the answer if there is a dotted line.

You can circle more than 1 answer for each question if you need to.

For example, if something was done to you by more than one person and these people were both older and younger than you, you would circle both the words

Older than you

AND

Younger than you

Has anyone ever used force to take something away from you that you were carrying or wearing?

Question 1

YES (answer the questions below) NO (go to question 2)

Q 1a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
- How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened to you.

- How many people did this? 1 2 3 or more (a gang) Don't know
- Who did this? Someone you know A stranger Boyfriend/Girlfriend Don't know
- Were they: Male Female Don't know
- How old were they? The same school year as you Older than you Younger than you Don't know
- Were you with anyone when it happened? No Yes (who?).....
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?.....
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened?.....
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know

- How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?).....
- Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Did anyone steal something from you and never give it back? Things like a backpack, money, watch, clothing, bike, i-pod, or anything else?

Question 2

YES (answer the questions below) NO (go to question 3)

Q 2a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
- How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened to you.

- How many people did this? 1 2 3 or more (a gang) Don't know
- Who did this? Someone you know A stranger Boyfriend/Girlfriend Don't know
- Were they: Male Female Don't know
- How old were they? The same school year as you Older than you Younger than you Don't know
- Were you with anyone when it happened? No Yes (who?).....
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?.....
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened?.....
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know

- How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?).....
- Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 3

Did anyone break or ruin any of your things on purpose?
Somewhere like: at school, at a shop, in a car, on the street,
or anywhere else?

YES (answer the questions below) NO (go to question 4)

Q 3a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
- How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened to you.

- How many people did this? 1 2 3 or more (a gang) Don't know
- Who did this? Someone you know A stranger Boyfriend/Girlfriend Don't know
- Were they: Male Female Don't know
- How old were they? The same school year as you Older than you Younger than you
- Did they use an object or a weapon? No Yes (what was it?)
- Were you with anyone when it happened? No Yes (who?)
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen? Where in school?
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened? Yes No
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
- How scared did you feel? Please circle a number on the scale of 1 to 5
(1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5
(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?)

Police	Teacher	Parent	Reporting system	Friend	Other
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- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 4

Did anyone hit, kick or attack you on purpose?
Somewhere like: at school, at a shop, in a car, on the street,
or anywhere else?

YES (answer the questions below) NO (go to question 5)

Q 4a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
- How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened to you.

- How many people did this? 1 2 3 or more (a gang) Boyfriend/Girlfriend
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Did they use an object or a weapon? No Yes (what was it?)
- Were you with anyone when it happened? No Yes (who?)
- Were you taken to hospital because of your injuries? Yes No
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch During break
- During a lesson At the end of the day Where in school?
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened? Yes No
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
- How scared did you feel? Please circle a number on the scale of 1 to 5
(1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5
(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?)

Police	Teacher	Parent	Reporting system	Friend	Other
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- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 5 When a person is kidnapped, it means they were made to go somewhere, like into a car, by someone who they thought might hurt them. Did anyone try to kidnap you?
 YES (answer the questions below) NO (go to question 6)

- Q 5a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- How many people did this? 1 2 3 or more (a gang)
 - Who did this? Someone you know A stranger Boyfriend/Girlfriend
 - Were they: Male Female
 - How old were they? The same school year as you Older than you Younger than you
- Don't know
- Were you with anyone when it happened? No Yes (who?).....
 - Where did it happen? In school Outside of school
 - If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?.....
 - If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened? Yes No
 - Had you been drinking alcohol when this happened? Yes No
 - Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
 - How scared did you feel? Please circle a number on the scale of 1 to 5
(1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5
(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?).....
- | | | | | | |
|--------|---------|--------|------------------|--------|-------|
| Police | Teacher | Parent | Reporting system | Friend | Other |
|--------|---------|--------|------------------|--------|-------|
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 6 Were you hit, kicked or attacked because of your skin colour, religion, or where your family comes from? Because of a physical problem? Or because of your sexuality?
 YES (answer the questions below) NO (go to question 7)

- Q 6a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- How many people did this? 1 2 3 or more (a gang)
 - Who did this? Someone you know A stranger Boyfriend/Girlfriend
 - Were they: Male Female
 - How old were they? The same school year as you Older than you Younger than you
 - Did they use an object or a weapon? No Yes (what was it?).....
 - Were you with anyone when it happened? No Yes (who?).....
 - Were you taken to hospital because of your injuries? Yes No
 - Where did it happen? In school Outside of school
 - If it happened at school, when did it happen? Before lessons started During lunch During break
- During a lesson At the end of the day Where in school?.....
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened? Yes No
 - Had you been drinking alcohol when this happened? Yes No
 - Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
 - How scared did you feel? Please circle a number on the scale of 1 to 5
(1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5
(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?).....
- | | | | | | |
|--------|---------|--------|------------------|--------|-------|
| Police | Teacher | Parent | Reporting system | Friend | Other |
|--------|---------|--------|------------------|--------|-------|
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 7 Has anyone picked on you by chasing you or grabbing your hair or clothes or by making you do something you didn't want to do? YES (answer the questions below) NO (go to question 8)

- Q 7a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 • How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- How many people did this? 1 2 3 or more (a gang)
 - Who did this? Someone you know A stranger Boyfriend/Girlfriend
 - Were they: Male Female
 - How old were they? The same school year as you Older than you Younger than you
 - Were you with anyone when it happened? No Yes (who?).....
 - Where did it happen? In school Outside of school
 - If it happened at school, when did it happen? Before lessons started During lunch
 - During break During a lesson At the end of the day
 - Where in school did this happen?.....
 - If it happened outside of school, when did it happen? On the way to school
 - Coming home from school In the evening after school At the weekend
 - Can you name where outside of school this happened?.....
 - Had you been drinking alcohol when this happened? Yes No
 - Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
 - How scared did you feel? Please circle a number on the scale of 1 to 5
 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5
 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?).....
- | | | | | | |
|--------|---------|--------|------------------|--------|-------|
| Police | Teacher | Parent | Reporting system | Friend | Other |
|--------|---------|--------|------------------|--------|-------|
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 8 Have you been scared or felt really bad because someone was calling you names, saying mean things to you, making threats, saying they didn't want you around or not including you in things? YES (answer the questions below) NO (go to question 9)

- Q 8a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 • How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- How many people did this? 1 2 3 or more (a gang)
 - Who did this? Someone you know A stranger Boyfriend/Girlfriend
 - Were they: Male Female
 - How old were they? The same school year as you Older than you Younger than you
 - Were you with anyone when it happened? No Yes (who?).....
 - Where did it happen? In school Outside of school
 - If it happened at school, when did it happen? Before lessons started During lunch
 - During break During a lesson At the end of the day
 - Where in school did this happen?.....
 - If it happened outside of school, when did it happen? On the way to school
 - Coming home from school In the evening after school At the weekend
 - Can you name where outside of school this happened?.....
 - Had you been drinking alcohol when this happened? Yes No
 - Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
 - How scared did you feel? Please circle a number on the scale of 1 to 5
 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5
 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?).....
- | | | | | | |
|--------|---------|--------|------------------|--------|-------|
| Police | Teacher | Parent | Reporting system | Friend | Other |
|--------|---------|--------|------------------|--------|-------|
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Has anyone ever used the internet or a mobile phone to bother or harass you or to spread mean words, pictures or videos about you?

Question 9

YES (answer the questions below) NO (go to question 10)

- Q 9a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
 - How did they do this? Mobile phone Internet Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- How many people did this? 1 2 3 or more (a gang) Don't know
 - Who did this? Someone you know A stranger Boyfriend/Girlfriend Don't know
 - Were they: Male Female Don't know
 - How old were they? The same school year as you Older than you Younger than you
- Don't know
- If they used the internet, which internet site was it on? Facebook ~~Bebo~~ Twitter
 - MSN E-mail Other (what?)
 - How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?)
- Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Has anyone ever used the internet or a mobile phone to ask you sexual questions about yourself or to try to get you to talk about sex when you did not want to talk about those things?

Question 10

YES (answer the questions below) NO (go to question 11)

- Q 10a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
 - How did they do this? Mobile phone Internet Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- How many people did this? 1 2 3 or more (a gang) Don't know
 - Who did this? Someone you know A stranger Boyfriend/Girlfriend Don't know
 - Were they: Male Female Don't know
 - How old were they? The same school year as you Older than you Younger than you
- Don't know
- If they used the internet, which internet site was it on? Facebook ~~Bebo~~ Twitter
 - MSN E-mail Other (what?)
 - How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?)
- Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 11

Did a boyfriend or girlfriend or anyone you went on a date with push, slap, hit or kick you?

YES (answer the questions below) NO (go to question 12)

Q 11a

- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- Who were they? Your Boyfriend Your Girlfriend A male you went on a date with
A female you went on a date with
 - How old were they? The same school year as you Older than you Younger than you
 - Were you with anyone else when it happened? No Yes (who?).....
 - Where did it happen? In school Outside of school
 - If it happened at school, when did it happen? Before lessons started During lunch
 - During break During a lesson At the end of the day
 - Where in school did this happen?.....
 - If it happened outside of school, when did it happen? On the way to school
 - Coming home from school In the evening after school At the weekend
 - Can you name where outside of school this happened?.....
 - Had you been drinking alcohol when this happened? Yes No
 - Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
 - How scared did you feel? Please circle a number on the scale of 1 to 5
(1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5
(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?).....
Police Teacher Parent Reporting system Friend Other
 - How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 12

Did a boyfriend or girlfriend or anyone you went on a date with make you feel bad or feel scared because they were calling you names, saying mean things to you, making threats, intimidating you, or controlling you?

YES (answer the questions below) NO (go to question 13)

Q 12a

- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- Who were they? Your Boyfriend Your Girlfriend A male you went on a date with
A female you went on a date with
 - How old were they? The same school year as you Older than you Younger than you
 - Were you with anyone else when it happened? No Yes (who?).....
 - Where did it happen? In school Outside of school
 - If it happened at school, when did it happen? Before lessons started During lunch
 - During break During a lesson At the end of the day
 - Where in school did this happen?.....
 - If it happened outside of school, when did it happen? On the way to school
 - Coming home from school In the evening after school At the weekend
 - Can you name where outside of school this happened?.....
 - Had you been drinking alcohol when this happened? Yes No
 - Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
 - How scared did you feel? Please circle a number on the scale of 1 to 5
(1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5
(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?).....
Police Teacher Parent Reporting system Friend Other
 - How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 13 Has anybody (such as someone younger or older than you, a boyfriend or girlfriend, or someone you have been on a date with) touched your private parts when you did not want it or made you touch their private parts? YES (answer the questions below) NO (go to question 14)

- Q 13a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- How many people did this? 1 2 3 or more (a gang)
 - Who did this? Someone you know A stranger Boyfriend/Girlfriend
 - Were they: Male Female
 - How old were they? The same school year as you Older than you Younger than you
 - Were you with anyone when it happened? No Yes (who?)
 - Where did it happen? In school Outside of school
 - If it happened at school, when did it happen? Before lessons started During lunch
 - During break During a lesson At the end of the day
 - Where in school did this happen?
 - If it happened outside of school, when did it happen? On the way to school
 - Coming home from school In the evening after school At the weekend
 - Can you name where outside of school this happened?
 - Had you been drinking alcohol when this happened? Yes No
 - Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
 - How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?)
- | | | | | | |
|--------|---------|--------|------------------|--------|-------|
| Police | Teacher | Parent | Reporting system | Friend | Other |
|--------|---------|--------|------------------|--------|-------|
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 14 In the last year, did anyone make you look at their private parts by using force or by "flashing you"? YES (answer the questions below) NO (Turn over the page)

- Q 14a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened to you.*
- How many people did this? 1 2 3 or more (a gang)
 - Who did this? Someone you know A stranger Boyfriend/Girlfriend
 - Were they: Male Female
 - How old were they? The same school year as you Older than you Younger than you
 - Were you with anyone when it happened? No Yes (who?)
 - Where did it happen? In school Outside of school
 - If it happened at school, when did it happen? Before lessons started During lunch
 - During break During a lesson At the end of the day
 - Where in school did this happen?
 - If it happened outside of school, when did it happen? On the way to school
 - Coming home from school In the evening after school At the weekend
 - Can you name where outside of school this happened?
 - Had you been drinking alcohol when this happened? Yes No
 - Had the person/people who did this to you been drinking alcohol or taking drugs when they did this? Yes No Don't know
 - How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
 - How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
 - Who did you tell about what happened? Nobody (why not?)
- | | | | | | |
|--------|---------|--------|------------------|--------|-------|
| Police | Teacher | Parent | Reporting system | Friend | Other |
|--------|---------|--------|------------------|--------|-------|
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
 - How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Sometimes bad things don't happen to you but you see them happen to other people. This means to other people in REAL LIFE, not people on TV, in video games, or movies, or things that you just heard about.

We would like you to tell us about things that you have SEEN happen to other people. Please do not tell us about things you have seen happen to your family members that were done by other family members.

Question 15 In real life, did you SEE anyone steal something from another person and never give it back, even if the person who it belonged to was not there at the time? Things like a backpack, money, watch, clothing, bike, i-pod, or anything else?

YES (answer the questions below) NO (go to question 16)

Q 15a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
- How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened.

- How many people did this? 1 2 3 or more (a gang)
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Who did this happen to? Someone you know A stranger Boyfriend/Girlfriend
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened?
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this been drinking alcohol or taking drugs when they did this? Yes No Don't know
- How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?)
- Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 17 In real life, did you SEE anyone pick on someone else by chasing them or grabbing their hair or clothes or making them do something they didn't want to do? YES (answer the questions below) NO (go to question 18)

Q17a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
- How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened.

- How many people did this? 1 2 3 or more (a gang)
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Who did this happen to? Someone you know A stranger Boyfriend/Girlfriend
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened?
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this been drinking alcohol or taking drugs when they did this?
 - Yes No Don't know
- How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?).....

Police	Teacher	Parent	Reporting system	Friend	Other
--------	---------	--------	------------------	--------	-------
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 16 In real life, did you SEE anyone break or ruin something that did not belong to them on purpose? YES (answer the questions below) NO (go to question 17)

Q16a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
- How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened.

- How many people did this? 1 2 3 or more (a gang)
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Who did this happen to? Someone you know A stranger Boyfriend/Girlfriend
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened?
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this been drinking alcohol or taking drugs when they did this?
 - Yes No Don't know
- How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?).....

Police	Teacher	Parent	Reporting system	Friend	Other
--------	---------	--------	------------------	--------	-------
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

In real life, did you SEE anyone pick on someone else by calling them names or saying mean things to them?

Question 18

YES (answer the questions below) NO (go to question 19)

- Q18a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened.

- How many people did this? 1 2 3 or more (a gang)
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Who did this happen to? Someone you know A stranger Boyfriend/Girlfriend
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch

During break During a lesson At the end of the day

Where in school did this happen?

If it happened outside of school, when did it happen? On the way to school

Coming home from school In the evening after school At the weekend

Can you name where outside of school this happened? Yes No

Had you been drinking alcohol when this happened? Yes No

Had the person/people who did this been drinking alcohol or taking drugs when they did this?

Yes No Don't know

How scared did you feel? Please circle a number on the scale of 1 to 5

(1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5

How upset were you about what happened? Please circle a number on the scale of 1 to 5

(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5

Who did you tell about what happened? Nobody (why not?)

Police Teacher Parent Reporting system Friend Other

How much do you think the people/person you told believed you? Please circle a number on the

scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

How much did you feel supported by the people/person you told? Please circle a number on the

scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

In real life, did you SEE anyone get attacked on purpose? Somewhere like: at school, at a shop, in a car, on the street, or anywhere else?

Question 19

YES (answer the questions below) NO (go to question 20)

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
- How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened.

- How many people did this? 1 2 3 or more (a gang)
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Did they use an object or a weapon? No Yes (what was it?)
- Who did this happen to? Someone you know A stranger Boyfriend/Girlfriend
- Were they taken to hospital because of their injuries? Yes No
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch

During break During a lesson At the end of the day

Where in school did this happen?

If it happened outside of school, when did it happen? On the way to school

Coming home from school In the evening after school At the weekend

Can you name where outside of school this happened? Yes No

Had you been drinking alcohol when this happened? Yes No

Had the person/people who did this been drinking alcohol or taking drugs when they did this?

Yes No Don't know

How scared did you feel? Please circle a number on the scale of 1 to 5

(1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5

How upset were you about what happened? Please circle a number on the scale of 1 to 5

(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5

Who did you tell about what happened? Nobody (why not?)

Police Teacher Parent Reporting system Friend Other

How much do you think the people/person you told believed you? Please circle a number on the

scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

How much did you feel supported by the people/person you told? Please circle a number on the

scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 20 In real life, did you SEE anyone use force to take something away from someone else that they were carrying or wearing?

YES (answer the questions below) NO (go to question 21)

- Q20a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened.*

- How many people did this? 1 2 3 or more (a gang)
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Who did this happen to? Someone you know A stranger Boyfriend/Girlfriend
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened?
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this been drinking alcohol or taking drugs when they did this? Yes No Don't know
- How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?)
- Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 21

In real life, did you SEE anyone hurt an animal on purpose?

YES (answer the questions below) NO (go to question 22)

- Q 21a**
- How many times has this happened? 1 2 3 4 More than 5
 - How old were you: When it first happened? Age..... & When it last happened? Age.....
 - How long ago did this happen? Less than a year ago Over 1 year ago Both
- Please answer the following questions by thinking about the LAST TIME it happened.*

- How many people did this? 1 2 3 or more (a gang)
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Did the animal belong to you? Yes No
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened?
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this been drinking alcohol or taking drugs when they did this? Yes No Don't know
- How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?)
- Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 22 Did anyone steal something from your house that belongs to your family or someone you live with?
Things like a TV, stereo, car, or anything else?
YES (answer the questions below) NO (go to question 23)

Q 22a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened.

- How many people did this? 1 2 3 or more (a gang) Don't know
- Who did this? Someone you know A stranger Boyfriend/Girlfriend Don't know
- Were they: Male Female Don't know
- How old were they? The same school year as you Older than you Younger than you
- Where you in the house when it happened? Yes No
- Were other people in the house when it happened? Yes No
- Who did the thing that was stolen belong to?
Did something get stolen that was worth a lot of money? Yes No
- Did something get stolen that meant a lot to the person it belonged to? Yes No
- How scared did you feel? Please circle a number on the scale of 1 to 5
(1 means you were not scared at all, 5 means you were very upset) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5
(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?).....
Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 23 In real life, did you SEE anyone force somebody else to touch their private parts when they did not want it or make them touch their private parts?
YES (answer the questions below) NO (go to question 24)

Q 23a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age.....
How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened.

- How many people did this? 1 2 3 or more (a gang)
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Who did this happen to? Someone you know A stranger Boyfriend/Girlfriend
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?
If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened?
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this been drinking alcohol or taking drugs when they did this?
Yes No Don't know
- How scared did you feel? Please circle a number on the scale of 1 to 5
(1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5
(1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?).....
Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

Question 24

When a person is kidnapped, it means they were made to go somewhere, like into a car, by someone who they thought might hurt them. In real life, did you SEE anyone try to kidnap someone else?

YES (answer the questions below) NO

Q 24a

- How many times has this happened? 1 2 3 4 More than 5
- How old were you: When it first happened? Age..... & When it last happened? Age..... Both
- How long ago did this happen? Less than a year ago Over 1 year ago Both

Please answer the following questions by thinking about the LAST TIME it happened.

- How many people did this? 1 2 3 or more (a gang)
- Who did this? Someone you know A stranger Boyfriend/Girlfriend
- Were they: Male Female
- How old were they? The same school year as you Older than you Younger than you
- Who did this happen to? Someone you know A stranger Boyfriend/Girlfriend
- Where did it happen? In school Outside of school
- If it happened at school, when did it happen? Before lessons started During lunch
- During break During a lesson At the end of the day
- Where in school did this happen?
- If it happened outside of school, when did it happen? On the way to school
- Coming home from school In the evening after school At the weekend
- Can you name where outside of school this happened?
- Had you been drinking alcohol when this happened? Yes No
- Had the person/people who did this been drinking alcohol or taking drugs when they did this? Yes No Don't know
- How scared did you feel? Please circle a number on the scale of 1 to 5 (1 means you were not scared at all, 5 means you were very scared) 1 2 3 4 5
- How upset were you about what happened? Please circle a number on the scale of 1 to 5 (1 means you were not upset at all, 5 means you were very upset) 1 2 3 4 5
- Who did you tell about what happened? Nobody (why not?)
- Police Teacher Parent Reporting system Friend Other
- How much do you think the people/person you told believed you? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5
- How much did you feel supported by the people/person you told? Please circle a number on the scale of 1 to 5 (1 means not very much, 5 means very much) 1 2 3 4 5

We would like to help you feel safe inside school and outside of school.

Please answer these questions to help us make you feel safer.

Q1) We have just asked you a lot of questions about bad things that may have happened to you or you may have seen happen to someone else. Please tell us how you think these kinds of things could be stopped in the future in school or outside of school (for example, things like CCTV cameras, more police around etc)

.....

.....

.....

Q2) Do you think there should be a new way for you to tell somebody about these kinds of things? If you do, what kinds of things do you think there should be? (for example, being able to report the incident on the schools website, a post box in school for you to write down what happened and to post it without anyone knowing etc)

.....

.....

.....

Q3) What kinds of things would make you feel safer in school and when you are outside of school? (for example, self-defence classes, more police on the streets etc)

.....

.....

.....

Thank you for
answering these
questions!

Appendix 7. Journey Questionnaire

Journey questionnaire

We would like to know about the journey you take to and from school.
Please answer the questions below by circling or writing the correct answer.
If you do not understand something,
please put your hand up.

① How often do you go to school (not including when you are ill)? Every day Most days
Not very often Never

② How do you normally get to school (please circle the 1 you do most often. Only circle more than 1 if you do them an equal amount of time)? Walk Cycle Bus Taxi
Get a lift in a car Other (how?).....

③ If you walk or cycle to school, how much of this journey do you walk or cycle with friends?
All of it Most of it Half of it A little of it None of it

④ Do you usually stop anywhere on the way to school? No Yes

○ If yes, how many stops do you usually make?

○ Where do you usually stop?

⑤ How do you normally get home from school (please circle the 1 you do most often. Only circle more than 1 if you do them an equal amount of time)? Walk Cycle Bus
Taxi Get a lift in a car Other (how?).....

⑥ If you walk or cycle home from school, how much of this journey do you walk or cycle with friends?
All of it Most of it Half of it A little of it None of it

⑦ Do you usually stop anywhere on the way home from school? No Yes

○ If yes, how many stops do you usually make?

○ Where do you usually stop?

⑧ If you get the bus to and from school, what number bus do you get?

○ Please tell us the name of the bus company if you know it.....

○ Where do you get on the bus to get to school (name of the street).....

⑨ If you walk or cycle to and from school, how long does this normally take?

⑩ What time do you normally get home from school when you do not have any after school activities?
.....

➔

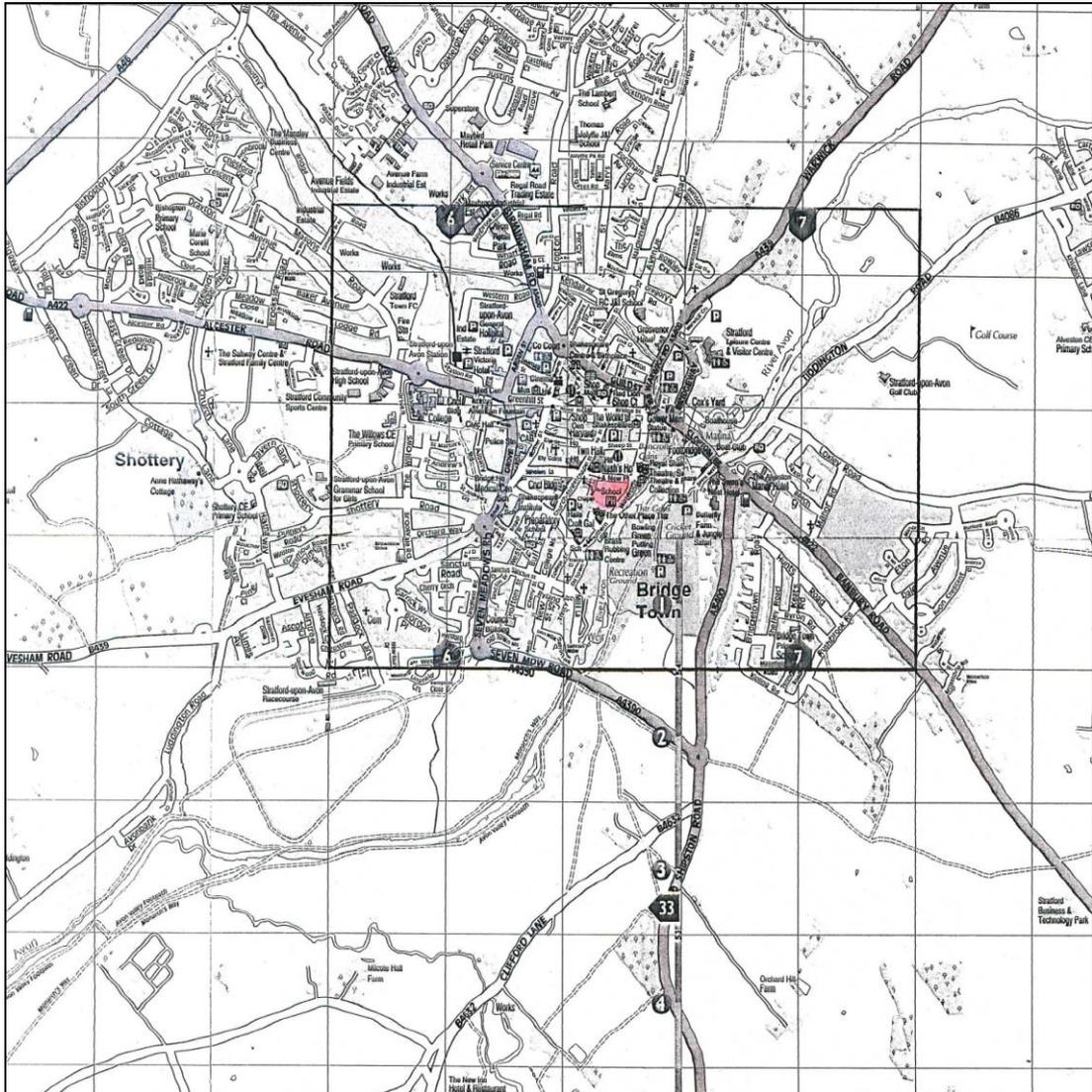
Do you do any activities before school? No Yes

- o If yes, what activities do you do before school?.....
- o How many days of your week are spent doing these activities?
- o How long do these activities normally last?
- o How do you normally get to school when you have these activities? Walk Cycle
Bus Taxi Get a lift in a car Other (how?).....

Ⓢ Do you do any activities straight after school? No Yes

- o If yes, what after school activities do you do?.....
- o How many nights of your week are spent doing these activities?
- o How long do these activities normally last?
- o How do you normally get home from school when you have these activities? Walk
Cycle Bus Taxi Get a lift in a car Other (how?).....

Appendix 8. Mapping Exercise



Appendix 9. Instruction Sheet for the Mapping Exercise

MAPPING EXERCISE

For this exercise you will need:

- The big map.
- The sheet of questions (called 'Mapping questions') that ask you about the same things you have just answered in the questionnaire.

Please follow these instructions:

You have been given a list of different things that may happen to young people in school and in the community (called 'Mapping questions'). These are the same things that you were asked about in the questionnaire you have just filled out on the computer. Look through the list and think about whether any of these things have happened to you in the last year (less than 1 year ago). If they have, look at the number (in brackets) next to the question and write this number on the map in the place where it happened (if the place is on the map).

For example, if you answered yes to the question;

(1) 'Has anyone used force to take something away from you that you were carrying or wearing?'

and this happened to you less than 1 year ago, look for the number in brackets next to the question, which is '1', and write this number on the map in the place where it happened.

If something happened more than once in the last year but it did not always happen in the same place, write the question number on the map in each place that it happened.

If the place where it happened isn't shown on the map, please miss it out and move on to the next question.

EXAMPLE



Appendix 10. Victimization Questions to Accompany Mapping Exercise

Mapping questions

If any of these things have happened to you in the last year (less than 1 year ago), please show us where they happened by writing the question number (given in brackets) in the correct place on the map.

- (1) Has anyone used force to take something away from you that you were carrying or wearing?
- (2) Did anyone steal something from you and never give it back? Things like a backpack, money, watch, clothing, bike, i-pod, or anything else?
- (3) Did anyone break or ruin any of your things on purpose?
- (4) Did anyone hit or attack you on purpose? Somewhere like: at home, at school, at a shop, in a car, on the street, or anywhere else?
- (5) When a person is kidnapped, it means they were made to go somewhere, like into a car, by someone who they thought might hurt them. Did anyone try to kidnap you?
- (6) Were you hit or attacked because of your skin colour, religion, or where your family comes from? Because of a physical problem? Or because of your sexuality?
- (7) Has anyone picked on you by chasing you or grabbing your hair or clothes or by making you do something you didn't want to do?
- (8) Have you been scared or felt really bad because someone was calling you names, saying mean things to you, making threats, saying they didn't want you around or not including you in things?
- (9) Did a boyfriend or girlfriend or anyone you went on a date with push, slap, hit or kick you?
- (10) Did a boyfriend or girlfriend or anyone you went on a date with make you feel bad or feel scared because they were calling you names, saying mean things to you, making threats, intimidating you, or controlling you?
- (11) In the last year, did anyone make you look at their private parts by using force or by "flashing you"?
- (12) Has anybody (such as someone younger or older than you, a boyfriend or girlfriend, or someone you have been on a date with) touched your private parts when you did not want it or made you touch their private parts?

Please turn over

Sometimes these things don't happen to you but you see them happen to other people. This means to other people in REAL LIFE. Not people on TV, video games, movies, or things that you just heard about. Please do not tell us about things you have seen happen to your family members by other family members.

- (13) In real life, did you SEE anyone steal something from another person and never give it back, even if the person who it belonged to was not there at the time? Things like a backpack, money, watch, clothing, bike, i-pod, or anything else?
- (14) In real life, did you SEE anyone break or ruin something that did not belong to them on purpose?
- (15) In real life, did you SEE anyone pick on someone else by chasing them or grabbing their hair or clothes or making them do something they didn't want to do?
- (16) In real life, did you SEE anyone pick on someone else by calling them names or saying mean things to them?
- (17) In real life, did you SEE anyone get attacked on purpose? Somewhere like: at home, at school, at a shop, in a car, on the street, or anywhere else?
- (18) In real life, did you SEE anyone use force to take something away from someone else that they were carrying or wearing?
- (19) In real life, did you SEE anyone hurt an animal on purpose?
- (20) In real life, did you SEE anyone force somebody else to touch their private parts when they did not want it or make them touch their private parts?
- (21) When a person is kidnapped, it means they were made to go somewhere, like into a car, by someone who they thought might hurt them. In real life, did you SEE anyone try to kidnap someone else?

Appendix 11. TSCC-A

	Never	Sometimes	Lots of times	Almost all of the time
1. Bad dreams or nightmares	0	1	2	3
2. Feeling afraid something bad might happen.....	0	1	2	3
3. Scary ideas or pictures just pop into my head.....	0	1	2	3
4. Pretending I am someone else	0	1	2	3
5. Arguing too much	0	1	2	3
6. Feeling lonely.....	0	1	2	3
7. Feeling sad or unhappy	0	1	2	3
8. Remembering things that happened that I didn't like.....	0	1	2	3
9. Going away in my mind, trying not to think	0	1	2	3
10. Remembering scary things.....	0	1	2	3
11. Wanting to yell and break things	0	1	2	3
12. Crying.....	0	1	2	3
13. Getting scared all of a sudden and don't know why	0	1	2	3
14. Getting mad and can't calm down	0	1	2	3
15. Feeling dizzy	0	1	2	3
16. Wanting to yell at people	0	1	2	3
17. Wanting to hurt myself.....	0	1	2	3
18. Wanting to hurt other people.....	0	1	2	3
19. Feeling scared of men	0	1	2	3
20. Feeling scared of women	0	1	2	3
21. Washing myself because I feel dirty on the inside	0	1	2	3
22. Feeling stupid or bad.....	0	1	2	3
23. Feeling like I did something wrong.....	0	1	2	3
24. Feeling like things aren't real	0	1	2	3
25. Forgetting things, can't remember things	0	1	2	3
26. Feeling like I'm not in my body	0	1	2	3
27. Feeling nervous or jumpy inside.....	0	1	2	3
28. Feeling afraid	0	1	2	3
29. Can't stop thinking about something bad that happened to me ...	0	1	2	3
30. Getting into fights	0	1	2	3
31. Feeling mean	0	1	2	3
32. Pretending I'm somewhere else.....	0	1	2	3
33. Being afraid of the dark	0	1	2	3
34. Worrying about things.....	0	1	2	3
35. Feeling like nobody likes me.....	0	1	2	3
36. Remembering things I don't want to remember	0	1	2	3
37. My mind going empty or blank.....	0	1	2	3
38. Feeling like I hate people.....	0	1	2	3
39. Trying not to have any feelings	0	1	2	3
40. Feeling mad.....	0	1	2	3
41. Feeling afraid somebody will kill me	0	1	2	3
42. Wishing bad things had never happened	0	1	2	3
43. Wanting to kill myself.....	0	1	2	3
44. Daydreaming	0	1	2	3

0 = Never
 1 = Sometimes
 2 = Lots of times
 3 = Almost all of the time

0 = Never
 1 = Sometimes
 2 = Lots of times
 3 = Almost all of the time

Appendix 12. Safeguarding Procedure

- **Procedure for reporting children who are identified as being at risk of serious harm:**

Any young person identified from the below criteria as being at risk of serious harm to themselves or others will be discussed with the contact within Warwickshire police. Following this, the designated Child Protection Officer for the school will be contacted in order to speak to/ intervene with the young person where this is deemed necessary.

- **Items used to identify risk of harm on the TSCC**

Pre-defined 'Critical items':

- Q 17. Wanting to hurt myself
- Q 18. Wanting to hurt other people
- Q 19. Feeling scared of men
- Q 20. Feeling scared of women
- Q 30. Getting into fights
- Q 41. Feeling afraid someone will kill me
- Q 43. Wanting to kill myself

- **Author defined 'critical items' when present in conjunction with the critical items outlined above:**

- Q 21. Washing myself because I feel dirty inside
- Q 28. Feeling afraid

Any critical item scored 2 ('happens lots of times') or 3 ('happens almost all of the time') will automatically be followed up on. If critical answers are scored 1 ('happens sometimes'), answers on the young person's victimisation questionnaire will be reviewed in order to assess whether intervention is needed.

Any score above 0 ('never happens') for Item 43: 'Wanting to kill myself', will be automatically followed up on. In cases where 'less serious' answers/scores are presented, the young person's pattern of response will be used to determine any possible need for intervention.

- **Items used to identify risk of harm within the Victimisation**

- **Questionnaire**

Q 5. Kidnap

Q 6. Hate crime

Q 13. Contact sexual assault

Q 23. Witness to contact sexual assault

Q 24. Witness to kidnap

If a young person answers 'yes' to the above screener questions on the victimisation questionnaire, the incident and associated details will be discussed with the contact person at Warwickshire police. The young person's responses to the TSCC will also be reviewed. If risk of harm is identified, the designated child protection officer for the school will then be contacted.

Appendix 13. Example of a Parent Information and Consent Letter

Dear Parent/Guardian

In a few weeks time a workshop will be carried out at school about safety and victimisation. This will be to discuss victimisation in the community and at school and to make young people aware of how they can protect themselves from crime and bullying.

'Safety and Victimisation' workshop

During this workshop some activities will be given out to young people as part of a study by the University of Nottingham. These activities are designed to gain information on the types of negative events young people may experience outside of the home, such as having their mobile phone stolen.

These study activities will include:

- A small questionnaire with some questions on social relationships, activities outside of school, current living situation, and involvement with the police.
- A questionnaire booklet asking about any negative events young people may have experienced or witnessed in the community or in school.
- A map for them to draw their routes to, from, and outside of school and to show where any negative events have happened.
- A small questionnaire to ask them about how they are feeling.

At the end of the workshop, information will be given about help services that are available to young people.

We would also like to interview a small number of the young people who take part in the study. This will happen on a day after the workshop and is designed to find out a little more about the activities they do outside of school and the types of experiences they may have had.

All of the information given by the pupils will be confidential, meaning that parents and teachers will not be able to find out what each young person has written. Instead, the information will be gathered together to give a complete picture of the types of negative events young people experience outside of the home. The only exception to this is if a young person writes something in one of the activities that is seen as placing them at risk of serious harm (this will be identified by the person carrying out the study, and not by anyone at the school). In this case, someone at the school will be told so that they can work with the young person to reduce their risk of serious harm, and the young person's carers will be informed.

Aims of the project

The project aims to help young people to stay safe and feel safe at school and in the community. By completing the activities related to the study, it is hoped that a better picture of the types of negative events young people experience can be developed. From this, we hope to help put preventative measures in place to stop these things happening to young people and to help them deal with their experiences if they do.

Parental consent

If you do not want your child to take part in the study and to do the study activities in the workshop (this is the questionnaires and the mapping exercise), they will be given a different educational task to do which will be related to safety and victimisation. This will not be part of the study and will not ask the young people about their own experiences. It will however, provide them with an equal level of exposure to issues relating to crime and bullying and how to help themselves stay safe. Equally, if you do not give your permission for your child to be interviewed, they will not be invited to take part in an interview at a later date.

There is a form attached to this letter. If you DO NOT want your child to do the study activities in the workshop or to take part in an interview, please tick the box on the form to show this and send it back to school as soon as possible. If you are happy for your child to do the study activities within the

workshop but you DO NOT want them to be interviewed at a later date, please tick the box on the form to show this and send it back to the school. You can post forms back to school using the pre-paid envelope provided, or you can send it back to school with your child.

We will send you 2 of these letters over the next 2 weeks to make sure you receive them and have chance to respond. If we do not hear from you by Friday 24th September, we will assume that you allow your child to take part in the study and in a later interview. Your child will then be given a form to fill out to say whether they would like to take part in the study activities and whether they would like to give an interview.

If you would like more details about the workshop, the study activities or the interviews, please contact the school or Vicki Jackson at lwxyj@nottingham.ac.uk or 0115 84 66929.

I

CONSENT FORM

Please fill out this consent form and either post it to the school in the pre-paid envelope provided, or send it back to school with your child. Please only fill out the consent form if you DO NOT want your child to do any of the study activities in the workshop OR to take part in an interview, or if you are happy for your child to do the study activities in the workshop but you DO NOT want them to be interviewed at a later date

If we do not hear from you by Friday 24th September, we will assume that you allow your child to take part in the study and in a later interview.

I DO NOT wish for my child to take part in any of the study activities in the workshop OR to be interviewed at a later date.

I give my consent for my child to take part in the study activities in the workshop, but I DO NOT wish for them to take part in any interviews.

Child's name.....

Parent/Guardian name.....

Parent/Guardian signature.....

Date.....

Appendix 14. Example of a Letter of Support From a School

Dear Parent/Guardian

As you are aware, our school is committed to making sure our pupils stay safe and feel safe both inside school, and on their way to and from school. As part of this commitment, we are working with the University of Nottingham and Warwickshire police and the Safer Schools Partnership on a project aimed at understanding and improving the safety of our young people in school and in the community.

As part of the PSHE curriculum, we will shortly be delivering 2 lessons to all Year 10 pupils on 'Safety and Victimisation'. These lessons will focus on the types of bad experiences young people may face in the school and the community, and give them information on how they can help to keep themselves safe and where they can go for help. During these lessons, some activities will be given out to pupils to gain information on the types of experiences they may have had and to look at their journeys to and from school. More information about these activities is given within this information pack. If you do not wish for your child to complete the activities as part of the project, please post the enclosed consent form back to the school or send it back with your child.

This is an important project that will help us work towards keeping our young people safe and happy in our school and the wider community.

Yours sincerely

[Headteacher]

Appendix 15. Young Person Consent Letter

Dear

In a few weeks time there will be a workshop in school about safety. The workshop will start with a talk about the types of things young people may experience and how they can help themselves to stay safe. Some activities will then be given out as part of a study on the types of bad things young people may experience outside of their home.

These study activities will include:

- A small questionnaire asking you some questions about yourself.
- A booklet asking about any negative events you have experienced or witnessed in the community or in school.
- A map for you to draw your routes to, from, and outside of school, and for you to show where any negative experiences have happened to you.
- A small questionnaire to ask you how you are feeling.



We would also like to do a little interview with a small number of young people who take part in the study. This will happen on a day after the workshop and is to find out a little more about the activities you do outside of school and the types of experiences you may have had.

The study hopes to help young people stay safe and feel safe at school and in the community. By doing the activities related to the study, we would like to be able to understand more about the types of negative events young people experience. From this, we hope to help stop these things happening to young people and to help them deal with any bad experiences they may have had.

It is up to you whether you do the activities in the workshop that are part of the study. If you do not want to fill out the study activities during the workshop, you will be given a different educational task to complete about safety and victimisation. This will not be part of the study and will not ask you about your own experiences.

If you would like to do the study activities and be interviewed, everything you tell us will be confidential, which means that nobody will find out what you say. However, if you tell us something that we think means you are at risk of SERIOUS harm, we may have to tell someone at school so that they can help you, and the school may tell your parents.



Please fill out the form below to tell us whether you would like to do the activities in the workshop and take part in the study. Please also tell us if you would like to be interviewed after the workshop (not everyone who takes part in the study will be interviewed).

Please hand the form back to your teacher as soon as you have filled it in.



I would like to take part in the study activities in the workshop

I would like to take part in an interview after the workshop



I do not want to take part in the study activities in the workshop or to be interviewed after the workshop

Name.....

Date of Birth.....

Signature.....

Appendix 16. Intraclass correlation coefficients, variance inflation ratios and weighted means

Dependent variables	ICC	VIF	Adjusted mean cluster size	Actual sample size
Trauma outcomes				
Anxiety	0.01	1.83	84	727
Depression	0.06	5.98	84	727
Anger	0.01	1.83	84	727
PTS	0.03	3.49	84	727
Dissociation	0.02	2.66	84	727
Victimisation outcomes (Total)				
Ever been victimised in LT	0.05	5.20	84	730
Ever been directly victimised in LT	0.03	3.52	84	730
Ever been indirectly victimised in LT	0.08	7.64	83	727
Conventional crime (LT)	0.06	5.92	83	729
Property victimisation(LT)	0.03	3.46	83	729
Physical victimisation(LT)	0.05	5.05	82	726
Peer victimisation(LT)	0.02	2.64	83	728
Bullying(LT)	0.02	2.64	83	728
Dating violence(LT)	0.03	3.43	82	718

Sexual victimisation(LT)	0.02	2.62	82	726
Ever been victimised in PY	0.06	5.74	80	705
Ever been directly victimised in PY	0.04	4.24	82	716
Ever been indirectly victimised in PY	0.09	8.02	79	693
Conventional crime (PY)	0.07	6.6	81	712
Property victimisation(PY)	0.04	4.24	82	717
Physical victimisation(PY)	0.06	5.86	82	719
Peer victimisation(PY)	0.01	1.81	82	721
Bullying(PY)	0.01	1.81	82	721
Dating violence(PY)	0.01	1.82	83	728
Sexual victimisation(PY)	0.02	2.62	82	723
Multiple victimisation				
Victimised more than once (PY)	0.06	4.96	67	589
Victimised more than once (LT)	0.03	3.07	70	614
Aggregate LT victimisation	0.05	4.45	70	614
Aggregate PY victimisation	0.05	4.3	67	589
Aggregate categories of LT victimisation	0.04	3.76	70	614

Aggregate categories of PY victimisation	0.06	4.96	67	589
Ever been victimised on journey home from school	0.02	2.64	83	730
Ever been victimised in the community	0.03	3.37	80	711
Ever been victimised in the school	0.04	4.16	80	711
Been victimised in school and community	0.01	1.79	80	711
School-based victimisation				
<i>Males</i>				
Disability	0	1	38	255
Family composition ^a	0.03	2.14	39	258
In trouble with police	0.07	3.59	38	251
Friend in trouble with police	0.10	4.7	38	253
Never drank alcohol	0.06	3.16	37	248
School victim	0.06	3.28	39	256
School direct victim	0.02	1.76	39	257
School indirect victim	0.07	3.59	38	249
School conventional	0.005	1.19	39	259
School property	0.02	1.76	39	259
School physical	0.003	1.11	39	258

School peer	0.04	2.52	39	259
School bullying	0.05	2.9	39	259
School dating	*		39	259
School sexual	0.02	1.76	39	258
<i>Females</i>				
Disability	0.002	1.12	63	465
Family composition ^a	0.03	2.89	64	471
In trouble with police	0.04	3.48	63	464
Friend in trouble with police	0.14	9.82	64	470
Never drank alcohol	0.07	5.34	63	464
School victim	0.04	3.44	62	455
School direct victim	0.01	1.62	63	459
School indirect victim	0.0004	1.24	61	440
School conventional	0.01	1.63	64	471
School property	0.02	2.26	64	471
School physical	0.0008	1.50	64	471
School peer	0.02	2.26	64	471
School bullying	0.02	2.26	64	471
School dating	*		64	471
School sexual	0.02	2.26	64	471
<i>Poly-victims</i>				
LT Poly-victim	0.03	3.46	83	730
PY poly-victim	0.06	5.74	80	705

age	0.3	21.7 (sq. rt. 4.66)	70	614
Male	0.3	21.7	70	614
White	0.01	1.69	70	611
Disability	0.005	1.34	68	604
Family composition ^c	0.01	1.69	70	613
LT poly victims (LT victimisation)				
Assault ^a	0.05	4.4	69	605
Kidnap/ attempted kidnap ^f	0.03	3.01	68	602
Bias attack ^e	0.02	2.34	68	604
Dating physical	0.009	1.61	69	605
Contact sexual assault	*		69	609
PY poly victims (LT victimisation)				
Assault ^a	0.05	3.6	53	468
Kidnap/ attempted kidnap ^f	0.04	3.08	53	467
Bias attack ^e	0.01	1.52	53	468
Dating physical	0.007	1.36	53	463
Contact sexual assault	*		54	470
LT poly victims (PY victimisation)				
Assault ^a	0.05	4.4	69	605
Kidnap/ attempted kidnap ^f	0.005	1.35	70	613
Bias attack ^e	0.01	1.69	70	613
Dating physical	0.01	1.69	70	614

Contact sexual assault	*		69	609
PY poly victims (PY victimisation)				
Assault ^a	0.05	3.6	53	466
Kidnap/ attempted kidnap ^f	0.009	1.48	54	474
Bias attack ^c	0.01	1.53	54	473
Dating physical	0.009	1.48	54	474
Contact sexual assault	*			469
Victimisation type (LT, all genders)				
W. Emotional Bullying	0.06	5.86	82	721
Emotional bullying	0.02	2.62	82	721
Assault	0.05	5.05	82	720
Theft	0.02	2.6	81	714
W. Bullying	0.04	4.2	81	716
Internet harassment	0.02	2.62	82	719
W. Theft	0.03	3.43	82	719
Burglary	0.001	1.08	82	720
W. Vandalism	0.04	4.24	82	720
W. Assault	0.01	1.81	82	720
Internet sexual harassment	0.02	1.62	82	720
Bullying	0.01	1.81	82	723
Vandalism	0.02	2.6	81	717
W. Animal Cruelty	0.001	1.08	81	717
Robbery	0.008	1.64	82	718

Non-contact sexual assault	0.01	1.81	82	723
Contact sexual assault	*		82	725
Bias Attack	0.02	2.62	82	721
Dating emotional violence	0.02	2.6	81	717
W. Robbery	*		82	720
Kidnap	0.01	1.81	82	720
Dating physical violence	0.01	1.8	81	716
W. Sexual Assault	0.004	1.32	81	717
W. Kidnap	0	1	81	710
Vict type (PY all genders)				
W. Emotional Bullying	0.05	4.95	80	703
Emotional bullying	0.005	1.41	82	723
Assault	0.05	5.05	82	721
Theft	0.01	1.81	82	721
W. Bullying	0.03	3.43	82	720
Internet harassment	0.02	2.62	82	723
W. Theft	0.03	3.43	82	726
Burglary	*		82	719
W. Vandalism	0.03	3.43	82	726
W. Assault	0.01	1.81	82	725
Internet sexual harassment	0.02	2.62	82	724
Bullying	0.03	3.46	83	728
Vandalism	0.008	1.65	82	725

W. Animal Cruelty	*		82	724
Robbery	0.02	2.62	82	726
Non-contact sexual assault	0.01	1.82	83	728
Contact sexual assault	*		82	725
Bias Attack	0.01	1.82	83	729
Dating emotional violence	*		83	728
W. Robbery	*		83	728
Kidnap	0	1	83	729
Dating physical violence	0.02	2.66	84	730
W. Sexual Assault	*		83	728
W. Kidnap	0	1	83	729

* A negative value was produced as between-component variance was negative and therefore replaced by 0 in the random effects calculation using SPSS. ICC was not calculated or used within the thesis as a result.

ICC= Intraclass correlation coefficient, VIF= variance inflation factor

Appendix 17. Safety and Victimisation Workshop Presentation Slides

Safety workshop

University of Nottingham
Warwickshire police



Purpose of the workshop

- Help keep young people safe and happy at school and in the community.
- Need to know about the kinds of things young people experience in these settings.
- Many schools in Warwickshire are taking part.
- Honesty and openness is important

What is a victim?

Someone who is hurt, killed or injured by a person, group or event.
Someone who is tricked or cheated.

What does victimisation mean?

The act of making someone a victim.

What types of things happen to young people:

- In school
- On the journey to and from school
- In the community (outside of school on an evening and weekends)

Experiences of young people in school and in the community

- Crime
 - Theft/ Robbery
 - Vandalism
 - Assault
- Peer victimisation
 - Bullying
 - Internet abuse
- Dating violence
- Sexual victimisation
 - Contact sexual assault
 - Non-contact sexual assault

23.8% 10 – 15 year olds

23% bullied in school

21.3% physical, 62% emotional, 24% sexual

21% girls, 11% boys

Secrets

- A good secret is...
 - Something nice such as a surprise birthday party
 - Good secrets can be kept to yourself
- A bad secret is...
 - Bullying.
 - Crime.
 - No-one should ask you to keep a kiss, hug or touch secret.
 - You should always tell someone about a bad secret

If you are unsure, tell someone.

What will happen next?

- Split into classes
 - This week fill out a couple of questionnaires
 - Next week fill out 2 more questionnaires and a mapping exercise

Confidentiality

- No-one will find out what you write. Only the project team will be able to see the answers you give.
- If the project team think you or another young person is at risk of **serious harm**, they will have to tell someone.

Talk to someone

- It is important to get help and speak to someone about any bad experiences you have had.
- You will be given a booklet on where to go to get help and who you can talk to.
- You will also be given a booklet with advice on how to keep yourselves safe in the school and your community.

Appendix 18. Table Displaying LT Victimization Rates and Gender Differences for all 24 Types of Victimization (N= 710- 730 due to missing data).

Victimisation Type	Lifetime victimisation							
	Total			Male		Female		Significant gender difference
	N	%	95% CI (\pm)	N	%	N	%	χ^2
W. Emotional Bullying	341	47.3	8.81	100	39.2	241	51.7	1.76
Emotional bullying	252	35	9.12	75	29.3	177	38.1	2.13
Assault	185	25.7	7.18	96	37.6	89	19.1	5.85
Theft	142	19.5	4.69	60	23.8	82	17.7	1.45
W. Bullying	134	18.7	3.15	50	19.8	84	18.1	0.08
Internet harassment	116	16.1	4.36	22	8.6	94	20.3	6.28
W. Theft	103	14.3	4.74	41	16.1	62	13.4	0.29
Burglary	99	13.8	2.62	30	11.7	69	14.9	1.28
W. Vandalism	93	12.9	5.05	35	13.7	58	12.5	0.05
W. Assault	92	12.8	3.29	39	15.3	53	11.4	1.24
Internet sexual harassment	77	10.7	2.87	6	2.4	71	15.2	17.46***
Bullying	74	10.2	2.98	20	7.8	54	11.6	1.40
Vandalism	67	9.3	3.43	30	11.8	37	8	1.09

W. Animal Cruelty	60	8.4	2.11	18	7.1	42	9.1	0.78
Robbery	57	7.8	2.51	35	13.7	22	4.8	10.91***
Non-contact sexual assault	35	4.8	2.11	14	5.5	21	4.5	0.19
Contact sexual assault	31	4.3	^a	5	1.9	26	5.6	^a
Bias Attack	26	3.6	3.26	13	5.1	13	2.8	0.97
Dating emotional violence	18	2.5	1.84	4	1.6	14	3	0.52
W. Robbery	16	2.2	^a	7	2.8	9	1.9	^a
Kidnap	15	2.1	1.42	4	1.6	11	2.4	0.28
Dating physical violence	13	1.8	1.30	2	0.8	11	2.4	1.28
W. Sexual Assault	7	1	0.84	2	0.8	5	1.1	0.11
W. Kidnap	3	0.4	0.46	1	0.4	2	0.4	0.003

^aChi-square statistic and 95% CI could not be adjusted for clustering as there was a negative ICC.

Appendix 19. Table Displaying PY Victimization Rates and Gender Differences for all 24 Types of Victimization (N= 721- 730 due to missing data).

Victimization Type	Past year victimisation							
	Total			Male		Female		Significant gender difference
	N	%	95% CI (\pm)	N	%	N	%	χ^2
W. Emotional Bullying	229	32.6	7.70	71	28.5	158	34.8	0.58
Emotional bullying	143	19.8	3.45	47	18.4	96	20.5	0.32
Assault	110	15.3	5.92	63	24.6	47	10.1	5.32
Theft	69	9.6	2.90	32	12.5	37	8	1.95
W. Bullying	83	11.5	4.31	33	12.8	50	10.8	0.20
Internet harassment	79	10.9	3.68	13	5	66	14.2	5.45
W. Theft	58	8	3.64	27	10.5	31	6.6	1
Burglary	21	2.9	^a	5	2	16	3.5	^a
W. Vandalism	57	7.9	3.63	22	8.6	35	7.4	0.09
W. Assault	53	7.3	2.55	21	8.2	32	6.8	0.26
Internet sexual harassment	56	7.7	3.14	4	1.5	52	11.2	8.26**
Bullying	30	4.1	2.68	11	4.2	19	4.1	0.006
Vandalism	33	4.6	1.95	19	7.4	14	3	4.48

W. Animal Cruelty	26	3.6	^a	10	3.9	16	3.4	^a
Robbery	35	4.8	2.51	21	8.2	14	3	3.76
Non-contact sexual assault	24	3.3	1.76	11	4.3	13	2.8	0.66
Contact sexual assault	19	2.6	^a	3	1.2	16	3.4	^a
Bias Attack	12	1.6	1.23	9	3.5	3	0.6	4.51
Dating emotional violence	9	1.2	^a	1	0.4	8	1.7	^a
W. Robbery	6	0.8	^a	3	1.2	3	0.6	^a
Kidnap	2	0.3	0.4	1	0.4	1	0.2	0.18
Dating physical violence	10	1.4	1.39	2	0.8	8	1.7	0.40
W. Sexual Assault	4	0.5	^a	2	0.8	2	0.4	^a
W. Kidnap	1	0.1	0.23	0	0	1	0.2	0.55

^aChi-square statistic and 95% CI could not be adjusted for clustering as there was a negative ICC.

Appendix 20: Inclusion Checklist

ID number: Author: Date: Country:		
	Criterion met?	Comment
Study design <i>Cohort</i> with minimum 1 year follow-up <i>Case control</i> (using a prospective design with minimum 1 year follow-up)	Yes No Unclear Discuss	
Population Children/young people aged 0-18 (inclusive) Note: Must not be part of an intervention/ prevention	Yes No Unclear Discuss	
Exposure Does the study look <i>longitudinally</i> at at least 1 risk factor and/or 1 protective factor in relation to increasing/reducing likelihood of exposure to victimisation outside of the family (including onset)?	Yes No Unclear Discuss	
Outcome Does the study assess exposure to victimisation <i>outside</i> of the family after exposure to said risk/protective factors? Note: Dating violence is excluded	Yes No Unclear Discuss	

Include: YES NO

Reason for not including:

Appendix 21: Exclusion Criteria

Articles were excluded if they included/used the following:

Study design

- Use a cross-sectional design, or any other design that does not allow for cause and effect to be established
- Use a prospective longitudinal study but the follow-up period is less than 1 year
- Do not conduct a baseline assessment of victimisation and/or do not control for baseline levels of victimisation within the analysis
- Speculate about (using focus groups or interviews etc), but do not empirically research, risk or protective factors

Population

- Participants are above the age of 18 years (unless under 18's are studied as a separate group in studies where over 18's are included)
- Participants are taking part in an intervention or prevention measure (implemented by the school/ community or the researchers)

Exposure

- Look at the impact of prevention or intervention programs on exposure to victimisation. I.e. do not include studies where an intervention/ programme is the 'exposure' variable.
- Look at the impact of environmental violence- e.g. war, genocide, as the exposure variable

Outcome

- Measure **only** victimisation through family violence as the outcome
- Combine victimisation through community violence AND family violence (i.e. do not assess violence outside of the family separately) as the outcome
- Assess **only** hearing about violence as the outcome
- Assess **only** dating violence/ victimisation as the outcome

- Look at victimisation through school shootings as the outcome, as this is a phenomena in its own right
- Look **only** at ‘peer rejection’ and not ‘peer victimisation’ as the outcome, as rejection is questionable when defining it as a form of victimisation
- Look **only** at corporal punishment in schools and families as the outcome, as there is a cultural influence on this
- Look **only** at honour based or cultural crimes as the outcome as these are specific forms of victimisation and cannot be generalised
- Look **only** at prostitution, sex trafficking and sexual exploitation as the outcome
- Look **only** at ‘fighting behaviour’ or ‘involvement in fights’ as the outcome, as this implies an interaction between victim and offender and it cannot be determined who started the fight
- Look **only** at engagement in ‘risky behaviour’ and not ‘victimisation’ as the outcome variable
- Look at exposure to environmental violence- e.g. war, genocide, as the outcome variable
- Measures **only** ‘offending’, ‘violence’ or ‘aggression’ as the outcome variable

Appendix 22: Electronic Database Search Strategy

Database & host	Date searched	Population^a	Exposure^a	Outcome^a	Results (1990-2010)	2011 results (2010-2011)
<p><u>Cochrane database</u> (Wiley)</p> <p><i>(All Cochrane groups)</i></p> <p><i>(searched title, abstract and key words and MeSH terms)</i></p>	<p>04/08/10 + 7/10/11</p>	<p>- <i>Child</i> - <i>Child*</i> - <i>adolescent</i> - - <i>adolescent*</i> - <i>Teen*</i> - <i>Youth</i> - <i>boy*</i> - <i>Girl*</i> - <i>Juvenile*</i></p>	<p>- <i>Risk*</i> - <i>Risk</i> - <i>Protect*</i> - <i>Predict*</i></p>	<p>“community violence” - <i>bully*</i> - <i>bulli*</i> - “peer victimization” - “peer victimisation” - <i>peer AND victimi?ation</i> - <i>Violence</i> - <i>violen*</i> - <i>crime</i> - <i>crime</i> - <i>victim*</i> - <i>crime victims</i> - <i>crime victim</i></p>	99	26
<p><u>PsycINFO</u> (Ovid)</p> <p><i>(searched title, abstract, heading word, table of contents, key concepts and indexed terms)</i></p>	<p>11/08/10 + 7/10/11</p>	<p>- <i>Child*</i> - - <i>adolescent*</i> - <i>Teen*</i> - <i>Youth</i> - <i>boy*</i> - <i>Girl*</i> - <i>Juvenile*</i></p>	<p>- <i>Risk*</i> - <i>Protect*</i> - <i>Predict*</i></p>	<p>“community violence” - <i>bully*</i> - <i>bulli*</i> - “peer victimization” - “peer victimisation” - <i>peer AND victimi?ation</i> - <i>Violence</i> - <i>violen*</i> - <i>crime</i> - <i>crime</i> - - <i>Victimization</i> - <i>victim*</i> - <i>crime victims</i> - <i>crime victim</i></p>	4,825	828

Each word
Combined with
'school' and

Each word
Combined with
'school' and

<p><u>PsycARTICLES</u> (APA)</p> <p><i>(searched, abstract and keywords which included keywords, title and index terms)</i></p>	<p>05/08/10 + 7/10/11</p>	<p>- Child* - adolescent* - Teen* - Youth - boy* - Girl* - Juvenile*</p>	<p>- Risk* - Protect* - Predict*</p>	<p>“community violence” - bully* - bulli* - “peer victimization” - “peer victimisation” - peer AND victimi?ation - Violence - violen* - crime - <i>crime</i> - <i>Victimization</i> - victim* - crime victim</p>	<p>90</p>	<p>25</p>	<p>Each word Combined with 'school' and</p>
<p><u>PubMed</u> (NCBI)</p> <p><i>(searched title, abstract and MeSH terms)</i></p>	<p>05/08/10 + 7/10/11</p>	<p>- Child - Child* - adolescent* - Teen* - Youth - boy* - Girl* - Juvenile*</p>	<p>- Risk* - Risk - Protect* - Predict*</p>	<p>“community violence” - bully* - bulli* - “peer victimization” - “peer victimisation” - peer AND victimi?ation - Violence - violen* - crime - <i>crime</i> - victim* - <i>crime victims</i> - crime victim</p>	<p>2,971</p>	<p>445^b</p>	<p>Each word Combined with 'school' and</p>
<p><u>Web of Science</u> (ISI)</p> <p><i>(Science Citation Index Expanded, Social Sciences Citation Index, Arts & Humanities Citation Index,</i></p>	<p>05/08/10 + 7/10/11</p>	<p>- Child* - adolescent* - Teen* - Youth - boy* - Girl* - Juvenile*</p>	<p>- Risk* - Protect* - Predict*</p>	<p>“community violence” - bully* - bulli* - “peer victimization” - “peer victimisation” - peer AND victimi?ation - violen*</p>	<p>3,842</p>	<p>1,001</p>	<p>Each word Combined with 'school' and</p>

<p><i>Conference Proceedings Citation Index-Science)</i></p> <p><i>(searched 'topic' - title, abstract, author keywords and keywords plus)</i></p>				<ul style="list-style-type: none"> - crime - victim* - crime victim 		
<p><u>ProQuest-dissertations & theses</u> (Proquest)</p> <p><i>(searched citation and abstract-covers; Author, Personal Name, Abstract, Product Name, Article Title, Subject Terms, Company Name, Source (publication title), Geographical Name)</i></p> <p><i>(Indexed terms NOT included as it wouldn't run the search)</i></p>	<p>11/08/10 + 7/10/11</p>	<ul style="list-style-type: none"> - Child* - adolescent* - Teen* - Youth - boy* - Girl* - Juvenile* 	<ul style="list-style-type: none"> - Risk* - Protect* - Predict* 	<ul style="list-style-type: none"> “community violence” - bully* - bulli* - “peer victimization” - “peer victimisation” - peer AND victimi?ation - violen* - crime - victim* - crime victim 	<p>1,669</p>	<p>319</p>
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>Each word Combined with 'school' and</p> </div>						
<p>SCOPUS (SciVerse)</p>	<p>06/08/10 + 7/10/11</p>	<ul style="list-style-type: none"> - Child* - adolescent* - Teen* - Youth - boy* - Girl* - Juvenile* - juvenile - child - adolescent - teen 	<ul style="list-style-type: none"> - Risk* - Protect* - Predict* - Risk - Protect - Predict 	<ul style="list-style-type: none"> “community violence” - bully* - bully - bulli* - “peer victimization” - “peer victimisation” - peer AND victimi?ation - violen* 	<p>5,795</p>	<p>1,210</p>

		- <i>teenager</i> - <i>youth</i> - <i>boy</i> - <i>girl</i>		- <i>violence</i> - <i>crime</i> - <i>crime</i> - <i>victim*</i> - <i>victim</i> - <i>victimization</i> - <i>crime victim</i> - <i>crime victim</i>			Each word Combined with 'school' and
ASSIA (CSA Illumina) (searched KEYWORDS field which searches title, abstract, descriptor field and identifier field and also indexed terms)	06/08/10 + 12/10/11	- Child* - <i>children</i> - adolescent* - <i>adolescents</i> - Teen* - Youth - boy* - <i>males</i> - Girl* - <i>girls</i> - Juvenile* - <i>Young people</i>	- Risk* - Protect* - Predict*	"community violence" - bully* - bulli* - "peer victimization" - "peer victimisation" - peer AND victimization - violen* - <i>violence</i> - <i>crime</i> - <i>crime</i> - <i>victimization</i> - <i>victims</i> - <i>victim*</i> - <i>crime victim</i>	808	132	Each word Combined with 'school' and
International Bibliography of the Social Sciences (CSA Illumina)	06/08/10 + 12/10/11	Same search strategy as ASSIA as same search/database provider (see above)			232	90	
Social services abstracts and sociological abstracts (CSA Illumina)	06/08/10 + 12/10/11	Same search strategy as ASSIA as same search/database provider (see above)			1,679	224	
ERIC (CSA Illumina)	06/08/10 + 12/10/11	Same search strategy as ASSIA as same search/database provider (see above)			1,893	309	
Total					23,903	4609	
Overall total					28,512		

Note: Indexed terms/ MeSH terms are indicated in *italics*

^aSearch terms within each category combined with 'OR', and terms across categories combined with 'AND'

^bSearched specific dates from August 2010 to present

Appendix 23: Grey Literature Search Strategy

Website	Date of search	Search terms	Search limited to	Hits	Hits searched (first 100)	Relevant hits
World Health Organisation	04/09/12	<i>(combined search)</i> child*, OR adolescen*, OR teen*, OR youth, OR boy*, OR girl*, OR juvenile*, AND risk, OR protect*, OR predict*, AND violence, OR bull*, OR victim*	PDF, Written in English, Words appear anywhere in the page	1,810	100	0
Home Office	04/09/12	<i>(Combined search)</i> child*, OR adolescen*, OR teen*, OR youth, OR boy*, OR girl*, OR juvenile*, AND risk, OR protect*, OR predict*, AND violence, OR bull*, OR victim*	Written in English, Words appear anywhere in the page			
			PDF	115	100	0
			Word doc	14	14	0
NSPCC	05/09/12	<i>(words searched separately)</i> Risk Protect* Predict Violence Bully Victim* Bullied		250	100	0
				250	100	0
				41	41	0
				250	100	0
				57	57	0
				236	100	0
				134	100	0

		victimisation		75	75	0	
Save the children	05/09/12	<i>(words searched separately)</i>	Searched online library only				
		Risk		38	38	0	
		Protect*		34	34	0	
		Predict		1	1	0	
		Violence		26	26	0	
		Bully		0	0	0	
		Victim*		0	0	0	
		Bullied		0	0	0	
		Victimisation		0	0	0	
		<i>(combined search)</i>	Searched whole website				
		risk, OR		48	48	0	
		protect*, OR		822	100	0	
		predict*		42	42	0	
		violence		226	100	0	
bully OR		11	11	0			
bullied							
victim							
victimisation							
OR							
victimization							
Action for children	04/09/12	<i>(combined search)</i> risk, OR protect, OR predict, AND violence, OR bull, OR victim		105	105	0	
Barnardos	05/09/12	<i>(words searched separately)</i>	Research and publications				
		Risk		17	17	0	
		protect		13	13	0	

		predict violence		1 2	1 2	0 0
		bully		7	7	0
		bullied		1	1	0
		victim		4	4	0
		victimised		0	0	0
UNICEF	04/09/12	(<i>combined search</i>) risk, OR protect*, OR predict*	Publications	37	37	0
		violence, OR bull*, OR victim*	publications	23	23	0
Total				4,690	1,497	0

Appendix 24: Quality Assessment Criteria for Cohort Studies

	Y 2	P 1	N 0	U 0	DISCUSS
1. Selection/ sampling/ population bias					
Was the exposure group representative of the <i>target</i> population?					
Were the groups recruited in an unbiased and appropriate way?					
Is the sample size large enough to produce a reliable outcome - <i>Did they conduct a power analysis?</i> - <i>How was sample size decided?</i>					
<i>Risk of selection bias? High (2) Unclear(1) Low(0)</i>					
2. Measurement/ classification bias					
Was the risk/ protective factor assessed in a standardised way (<i>if applicable</i>)?					
Was the measurement and method to collect data on the risk/ protective factors the same for all participants?					
<i>Risk of predictor measurement bias? High (2) Unclear(1) Low(0)</i>					
Was the measurement(s) for victimisation objective? <i>No researcher influence?</i>					
Were the measures used to assess victimisation standardised and/or validated? (<i>Read up on the measure used if need to</i>)					
Is the definition of victimisation adequate?					
Is victimisation measured in the same way at baseline and follow-up?					
Was a reliable system/ method established for measuring victimisation? - <i>Was the way in which the data was collected appropriate (e.g. quiet</i>					

<i>room, privacy optimised etc)</i>					
Was the measure and method to collect victimisation data the same for each participant?					
Was the assessor of victimisation appropriate (i.e. self report, teacher, parent etc)?					
Does the measurement make it clear as to the duration of victimisation measured? (e.g. victimisation between time points 1 and 2, first exposure, lifetime exposure etc)					
<i>Risk of outcome measurement bias</i>					<i>High (2)</i>
<i>Low(0)</i>					<i>Unclear(1)</i>
3. Attrition bias					
Was an adequate proportion of the cohort followed up? - <i>Percentage followed-up?</i>					
Were the participants who dropped out analysed to see if they were different to those who completed?					
Were there differences between completers and non-completers? <i>(Minus score)</i>					
Was there a statistical attempt to deal with missing data?					
<i>Risk of attrition bias</i>					<i>High (2)</i>
<i>Low(0)</i>					<i>Unclear(1)</i>
4. Confounding					
Were appropriate measures used to control for possible confounding variables?					
<i>Risk of confounding</i>					<i>High (2)</i>
<i>Low(0)</i>					<i>Unclear(1)</i>
5. Bias/ Inappropriate analysis					
Was the statistical analysis appropriate? - <i>Were assumptions of the data tested (e.g. normality etc)</i>					
Do the statistics used and significance values reported justify the conclusions?					
Was baseline level of victimisation controlled for in an					

appropriate way?					
<i>Risk of bias/ error in analysis</i>		<i>High (2)</i>		<i>Unclear(1)</i>	
<i>Low(0)</i>					
Is there reporting bias in that either output or data is not presented?					
<i>Risk of reporting bias</i>		<i>High (2)</i>		<i>Unclear(1)</i>	
<i>Low(0)</i>					
Were there any significant systematic errors?				Yes	
Possibly No					
Details...					
<i>Risk of systematic error in methods/ analysis/ interpretation</i>		<i>High (2)</i>			
<i>Unclear(1)</i>		<i>Low(0)</i>			
6. 'Other'					
Has there been an attempt to reduce common method variance (method covariance) by using multiple source reporting on assessments (<i>where appropriate</i>)?					
Was the choice to assess mediating and/or moderating variables (if chosen) justified and logical?					
Were mediating/ moderating variables assessed in a standardised way?					
Is there any reported conflict of interest by the authors? (<i>Minus score</i>)					
Overall bias score:				(out of 18)	
Overall item score:				(out of 52)	

Appendix 25. Data Extraction Form

Date of data extraction				
ID number				
Author				
Title				
Year				
Country				
Study type:	Cohort	Case-control		
Duration of follow up				
Cohort/ study name				
<i>Other info:</i>				
Population:				
Age	Range:	Mean:	SD:	
Gender	Mixed	Male	Female	
Sample	Community- mixed/ representative	<i>Urban</i>	<i>Suburban</i>	<i>Rural</i>
	Clinical	<i>Delinquent</i>	<i>High/ Low Risk</i>	
Ethnicity	Minority	Majority	Mixed	representative
Socio-economic status	High (%)	Low (%)	Middle (%)	
Sample size				

Recruitment procedure				
Attrition rate and reason				
Analysis of non-completers	Yes	No		
Representative sample?	Yes	No		
Excluded specific sample characteristics?	Yes (which)	No		
<i>Other info:</i>				
Exposure:				
What is assessed?	Risk (<i>which</i>)		Protective (<i>which</i>)	
How assessed?				
Type of risk	Individual	contextual	static	Dynam ic
Are mediating/moderating variables assessed?	Mediating (<i>which</i>)	Moderating (<i>which</i>)		
How assessed?				
<i>Other info:</i>				
Outcome:				
Victimisation exposure	Witnessed	Experienced/ Direct	Hearing	
Type of victimisation assessed	community violence'	violent	Non- violent	Sexual
	peer violence/ bullying	crime'	other	

Definition of victimisation/ type of questions asked				
Duration of exposure measured at follow-up	past year	lifetime	other:	
Type of exposure	First time victimisation	further victimisation		
Sub-group 'victims' and 'bully/victims'?	Yes	No		
Informant	self	parent	teacher	Peer
Where reported	school	home	telephone	other
How reported	standardised measure (i.e. JVQ)	newly designed measure	Interview	Questionnaire
How is victimisation assessed?	dichotomous	frequency		
Baseline measure of victimisation	Lifetime	Past year		
<i>Other info:</i>				
Analysis:				
Statistical tests used				
Missing data dealt with	Yes	No		
Controlled for confounding variables	Yes (which)	Partially (which)	No	
<i>Other info:</i>				

Findings:				
Significant risk/ protective factor <i>Data</i>				
Non-significant findings <i>Data</i>				
Significant mediator/ moderator <i>Data</i>				
<i>Other info:</i>				
Unclear or unanswered items	Yes	No	Number:	
Need to contact author	yes	no		