

**The Role of Attachment in the Relationship between
Perceived Parenting Dimensions and Bullying among
Preadolescents**

by

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Declaration

I declare that the thesis I hereby submit for the degree Philosophiae Doctor at the University of the Free State is my own, independent work and that I have not submitted it previously at/in another university/faculty. Furthermore, I cede copyright of this thesis in favour of the University of the Free State.

Mariska Carter

Date: _____

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BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

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BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

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Table of Contents

	Page
Declaration	i
Acknowledgements	ii
Statement by Language Editor	iv
Table of Contents	v
List of Tables	xiv
List of Figures	xviii
Abstract	xx
Chapter 1: Orientation to the Study	1
1.1 Introduction.....	1
1.2 Context.....	1
1.3 Rationale	5
1.4 Aims and Objectives	7
1.5 Research Methodology	8
1.6 Clarification of Terms.....	9
1.7 Outline of the Thesis	12
1.8 Chapter Summary	13
Chapter 2: The Developmental Psychopathology Model	15
2.1 Introduction.....	15
2.2 Historical Overview	16
2.3 Conceptual Overview	17
2.3.1 Definition.....	17
2.3.2 Fundamental Principles.	18
2.3.2.1 The developmental principle.....	18
2.3.2.2 The normative principle.	19
2.3.2.3 The multilevel principle.	20

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

2.3.2.4	The systems principle.....	20
2.3.2.5	The agency principle.....	22
2.3.2.6	The mutually informative principle.....	22
2.3.2.7	The longitudinal principle.....	23
2.4	Risk, Resilience, and Protective Factors.....	24
2.5	Mediation and Moderation.....	25
2.6	Domains of Functioning.....	26
2.6.1	Physical development.....	26
2.6.2	Cognitive development.....	28
2.6.2.1	Social-cognitive development.....	28
2.6.2.2	Moral development.....	28
2.6.3	Social-emotional development.....	30
2.6.3.1	Identity and self-esteem.....	30
2.6.3.2	Parent-child interactions.....	30
2.6.3.3	Peer interactions.....	31
2.7	Application of the DPM to the Current Research Study.....	32
2.8	Chapter Summary.....	34
	Chapter 3: Bullying Perpetration and Victimization.....	36
3.1	Introduction.....	37
3.2	Historical Overview.....	37
3.3	Conceptual Overview.....	39
3.3.1	Aggression.....	39
3.3.2	Bullying.....	39
3.3.2.1	Traditional bullying.....	39
3.3.2.2	Cyberbullying.....	43
3.3.3	Types of bullying.....	47
3.3.4	Overlap between traditional bullying and cyberbullying.....	49
3.4	Risk Factors.....	51
3.4.1	Individual level.....	52

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

3.4.1.1	Bully (perpetrator).....	52
3.4.1.2	Victim (target).	54
3.4.1.3	Bully-victim.	55
3.4.2	Contextual level.....	56
3.4.3	Involvement in specific types of bullying.	57
3.4.3.1	Direct bullying.....	58
3.4.3.2	Indirect bullying.	59
3.5	Prevalence.....	61
3.5.1	Traditional bullying	61
3.5.1.1	International findings.	61
3.5.1.2	South Africa.	63
3.5.2	Cyberbullying	64
3.5.2.1	International findings.	64
3.5.2.2	South Africa.	64
3.6	Demographic Characteristics.....	65
3.6.1	Traditional bullying	66
3.6.1.1	Age.	66
3.6.1.2	Gender.	69
3.6.1.3	Ethnicity.	70
3.6.2	Cyberbullying.	72
3.6.2.1	Age.	72
3.6.2.2	Gender.	73
3.6.2.3	Ethnicity.	74
3.7	Developmental Outcomes.....	75
3.7.1	Traditional bullying	75
3.7.1.1	Individual level.....	75
3.7.1.2	Contextual level.....	77
3.7.2	Cyberbullying.	79
3.8	Measurement.....	80
3.8.1	Methods of assessment	81

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

3.8.1.1	Definition-based versus behaviour-based.	81
3.8.1.2	Categorical approach versus dimensional approach.	83
3.8.1.3	Self-reports.	85
3.8.2	Adolescent Peer Relations Instrument: Bully/Target (APRI-BT).	86
3.9	Chapter Summary	87
Chapter 4: Perceived Parenting Dimensions		91
4.1	Introduction.....	92
4.2	Historical Overview	92
4.3	Conceptual Overview	93
4.3.1	Dimensional approach.	93
4.3.1.1	Bipolar model of parenting dimensions.	93
4.3.1.2	Unipolar model of parenting dimensions.	96
4.3.2	Typological approach	97
4.3.2.1	Parenting styles.	97
4.3.2.2	The work of Baumrind, Maccoby, and Martin.....	97
4.3.3	Dimensional versus typological approach.	99
4.4	Demographic Factors	103
4.4.1	Age.....	103
4.4.2	Gender.....	106
4.4.2.1	Differential exposure perspective.....	106
4.4.2.2	Differential susceptibility perspective.....	108
4.4.3	Ethnicity.....	111
4.4.3.1	Individualism and collectivism.	111
4.4.3.2	The South African context.	112
4.4.3.3	Ethnicity and parenting.	112
4.4.3.3.1	Ethnic equivalence model.....	113
4.4.3.3.2	Cultural values model.....	114
4.5	Developmental Outcomes.....	117
4.5.1	Acceptance versus rejection.	117
4.5.2	Firm control versus lax control.....	118

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

4.5.3	Psychological autonomy versus psychological control.....	119
4.6	Perceived Parenting Dimensions and Bullying	119
4.6.1	General aggression.....	119
4.6.2	Traditional bullying.....	122
4.6.2.1	Acceptance versus rejection.....	122
4.6.2.2	Firm control versus lax control.....	123
4.6.2.3	Psychological autonomy versus psychological control.....	126
4.6.3	Cyberbullying.....	128
4.6.3.1	Acceptance versus rejection.....	128
4.6.3.2	Firm control versus lax control.....	129
4.6.3.3	Psychological autonomy versus psychological control.....	130
4.7	Measurement.....	132
4.7.1	Methods of assessment	132
4.7.1.1	Categorical versus dimensional approach.....	132
4.7.1.2	Observational methods, interviews, and self-reports.....	132
4.7.2	Children’s Report of Parental Behaviour Inventory 30 (CRPBI-30).....	134
4.8	Chapter Summary	136
	Chapter 5: Attachment	139
5.1	Introduction.....	140
5.2	Historical Overview	140
5.3	Conceptual Overview	142
5.3.1	John Bowlby.....	142
5.3.1.1	Behavioural systems.....	142
5.3.1.2	Internal working models.....	143
5.3.2	Mary Ainsworth and attachment styles.....	145
5.3.3	Attachment and perceived parenting dimensions.....	147
5.4	Demographic Factors.....	150
5.4.1	Age.....	150
5.4.1.1	Continuity and discontinuity of attachment.....	150

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

5.4.1.2	Attachment during preadolescence.	153
5.4.2	Gender.....	155
5.4.3	Ethnicity.....	157
5.5	Developmental Outcomes.....	159
5.6	Attachment, Traditional Bullying, and Cyberbullying	161
5.7	Measurement.....	166
5.7.1	Methods of assessment.	166
5.7.1.1	Categories versus dimensions.	166
5.7.1.2	Observational methods, interviews, and self-reports.	167
5.7.2	Inventory of Parent and Peer Attachment (IPPA).	169
5.8	Chapter Summary	171
	Chapter 6: Bullying, Perceived Parenting Dimensions, and Attachment.....	173
6.1	Introduction.....	173
6.2	The Relationship between Bullying, Perceived Parenting Dimensions, and Attachment ..	173
6.2.1	Models of mediation.	174
6.2.2	Models of moderation.....	176
6.3	Current Research Study	178
6.4	Chapter Summary	179
	Chapter 7: Methodology	181
7.1	Introduction.....	181
7.2	Overview of Research Objectives.....	182
7.3	Ethical Processes and Principles.....	182
7.4	Research Design	186
7.5	Data Collection	186
7.5.1	Sampling.....	186
7.5.2	Challenges.....	187
7.5.3	Participants.	187
7.6	Measuring Instruments	189

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

7.6.1	Questionnaires	189
7.6.1.1	The Adolescent Peer Relations Instrument: Bully/Target (APRI-BT).	189
7.6.1.2	The Child's Report of Parental Behaviour Inventory 30 (CRPBI-30).....	190
7.6.1.3	The Inventory of Parent and Peer Attachment Revised (IPPA-R) for Children.	191
7.6.2	Translation of questionnaires.....	192
7.6.3	Internal consistencies of the questionnaires.	193
7.7	Statistical Procedures	195
7.7.1	Research Hypothesis 1.....	195
7.7.2	Research Hypothesis 2.....	196
7.7.3	Research Hypothesis 3.....	198
7.7.4	Treatment of missing data.	199
7.8	Chapter Summary	200
	Chapter 8: Results.....	201
8.1	Introduction.....	201
8.2	Descriptive Statistics.....	202
8.3	Possible Moderating Role of Gender and Ethnicity	205
8.4	Research Hypothesis 1	209
8.4.1	Hierarchical regression analyses with physical bullying as the criterion.	209
8.4.2	Hierarchical regression analyses with verbal bullying as the criterion.	210
8.4.3	Hierarchical regression analyses with social-relational bullying as the criterion.....	212
8.5	Research Hypothesis 2.....	213
8.5.1	Perceived parental acceptance.	213
8.5.2	Perceived parental firm control.	232
8.5.3	Perceived parental psychological control.	246
8.6	Research Hypothesis 3.....	258
8.7	Chapter Summary	262
	Chapter 9: Discussion	265
9.1	Introduction.....	265

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

9.2	Descriptive Statistics: Prevalence of bullying	266
9.2.1	Traditional bullying	266
9.2.2	Cyberbullying.	267
9.3	Direct Effects Models	268
9.3.1	Perceived parenting dimensions and bullying	268
9.3.1.1	Acceptance versus rejection.	268
9.3.1.2	Firm control versus lax control.	269
9.3.1.3	Psychological autonomy versus psychological control.....	270
9.3.2	Perceived parenting dimensions and attachment.	272
9.3.3	Attachment and bullying.....	273
9.4	Moderating Role of Gender and Ethnicity.....	273
9.5	Interactional Models	275
9.5.1	Models of mediation.	275
9.5.2	Models of moderation.....	278
9.6	Mean Differences between Gender and Ethnic Groups.....	280
9.6.1	Gender.....	281
9.6.2	Ethnicity.....	282
9.7	Chapter Summary	283
	Chapter 10: Contributions, Recommendations, and Conclusion	286
10.1	Introduction.....	286
10.2	Contributions, Strengths, Limitations, and Future Directions	286
10.3	Clinical Implications and Practical Applications.....	293
10.4	Conclusion	298
	Appendix A: Invitation to School Principals to Participate in a Research Study on Bullying	307
	Appendix B: Parent Informed Consent Form.....	311
	Appendix C: Child Assent Form.....	313

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Appendix D: Frequency Distribution of the Sample in terms of Age, Gender, Grade, and Ethnicity per school.....314

Appendix E: Biographical Questionnaire316

Appendix F: The Adolescent Peer Relations Instrument: Bully/Target (APRI-BT).....318

Appendix G: The Child’s Report of Parental Behaviour Inventory 30 (CRPBI-30).....323

Appendix H: The Inventory of Parent and Peer Attachment Revised (IPPA-R) for Children.....325

Appendix I: Correlation Coefficients between Bullying, Perceived Parenting Dimensions, Attachment, Gender, and Ethnicity for the Entire Sample327

References328

List of Tables

	Page
Table 1. <i>International Prevalence Rates of Bullying Perpetration and Victimization</i>	62
Table 2. <i>Overview of Developmental Outcomes of Bullying</i>	79
Table 3. <i>Summary of the Core Parenting Dimensions</i>	96
Table 4. <i>Summary of the Strengths and Limitations of the Two Approaches to Parenting</i>	102
Table 5. <i>Frequency Distribution according to Gender and Ethnicity</i>	188
Table 6. <i>Cronbach α-coefficients for APRI-BT, CRPBI-30, and IPPA-R for Children for the Entire Sample and by Ethnic Group</i>	194
Table 7. <i>Outline of the Moderated Hierarchical Multiple Regression Analysis</i>	198
Table 8. <i>Minimum and Maximum Values, Means, Standard Deviation, Skewness, and Kurtosis for the Entire Sample (N=1078)</i>	203
Table 9. <i>Correlations between Variables for the Entire Sample (N = 1078)</i>	204
Table 10. <i>Moderating Effect of Gender and Ethnicity in the Relationships between Perceived Parenting Dimensions and Different Forms of Bullying</i>	206
Table 10 (continued). <i>Moderating Effect of Gender and Ethnicity in the Relationships between Perceived Parenting Dimensions and Different Forms of Bullying</i>	207
Table 11. <i>Contributions of Perceived Parenting Dimensions to R² with Physical Bullying Perpetration as Criterion</i>	209
Table 12. <i>Contributions of Perceived Parenting Dimensions to R² with Physical Bullying Victimization as Criterion</i>	210
Table 13. <i>Contributions of Perceived Parenting Dimensions to R² with Verbal Bullying Perpetration as Criterion</i>	211
Table 14. <i>Contributions of Perceived Parenting Dimensions to R² with Verbal Bullying Victimization as Criterion</i>	211

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 15. <i>Contributions of Perceived Parenting Dimensions to R² with Social-relational Bullying Perpetration as Criterion</i>	212
Table 16. <i>Contributions of Perceived Parenting Dimensions to R² with Social-relational Bullying Victimization as Criterion</i>	213
Table 17. <i>Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Physical Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable</i>	215
Table 18. <i>Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Physical Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable</i>	218
Table 19. <i>Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Verbal Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable</i>	221
Table 20. <i>Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Verbal Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable</i>	224
Table 21. <i>Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Social-relational Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable</i>	227
Table 22. <i>Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Social-relational Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable</i>	230
Table 23. <i>Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Physical Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable</i>	233
Table 24. <i>Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Physical Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable</i>	236

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 25. <i>Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Verbal Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable</i>	238
Table 26. <i>Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Verbal Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable</i>	241
Table 27. <i>Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Social-relational Bullying Perpetration as the Dependent Variable and Attachment as the Intervening Variable</i>	243
Table 28. <i>Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Social-relational Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable</i>	245
Table 29. <i>Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Physical Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable</i>	247
Table 30. <i>Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Physical Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable</i>	249
Table 31. <i>Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Verbal Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable</i>	251
Table 32. <i>Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Verbal Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable</i>	253
Table 33. <i>Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Social-relational Bullying Perpetration as the Dependent Variable and Attachment as the Intervening Variable</i>	255

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 34. <i>Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Social-relational Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable</i>	257
Table 35. <i>Test for Equality of Covariance Matrices</i>	259
Table 36. <i>MANOVA Results with Gender and Ethnicity as Main Effects and the Different Forms of Bullying Perpetration and Victimization as the Dependent Variables</i>	259
Table 37. <i>ANOVA Results with Gender as Main Effect</i>	260
Table 38. <i>ANOVA Results with Ethnicity as Main Effect</i>	261
Table 39. <i>Summary of the Intervening Role of Attachment</i>	280

List of Figures

	Page
<i>Figure 1.</i> Outline of Chapter 1	1
<i>Figure 2.</i> Outline of Chapter 2	15
<i>Figure 3.</i> Outline of Chapter 3	36
<i>Figure 4.</i> The different forms of traditional bullying.....	48
<i>Figure 5.</i> Summary of the different classifications methods used to categorise cyberbullying ...	49
<i>Figure 6.</i> Outline of Chapter 4	91
<i>Figure 7.</i> Outline of Chapter 5	139
<i>Figure 8.</i> Outline of Chapter 6	173
<i>Figure 9.</i> Model of mediation among perceived parenting dimensions, attachment, and bullying perpetration or victimisation	176
<i>Figure 10.</i> Model of moderation among perceived parenting dimensions, attachment, and bullying perpetration or victimisation	178
<i>Figure 11.</i> Outline of Chapter 7	181
<i>Figure 12.</i> Outline of Chapter 8	201
<i>Figure 13.</i> The mediating effect of attachment in the relationship between perceived parental acceptance and physical bullying perpetration.....	216
<i>Figure 14.</i> The mediating effect of attachment in the relationship between perceived parental acceptance and physical bullying victimisation	219
<i>Figure 15.</i> Regression lines of low and high attachment groups with perceived parental acceptance as predictor of verbal bullying perpetration.....	222
<i>Figure 16:</i> The mediating effect of attachment in the relationship between perceived parental acceptance and verbal bullying victimisation	225

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Figure 17. The mediating effect of attachment in the relationship between perceived parental acceptance and social-relational bullying perpetration 228

Figure 18. The mediating effect of attachment in the relationship between perceived parental acceptance and social-relational bullying victimisation..... 231

Figure 19. The mediating effect of attachment in the relationship between perceived parental firm control and physical bullying perpetration 234

Figure 20. The mediating effect of attachment in the relationship between perceived parental firm control and verbal bullying perpetration 239

Figure 21. Outline of Chapter 9 265

Figure 22. Outline of Chapter 10 286

Abstract

Bullying is the intentional and repetitive use of aggression against targets who cannot easily defend themselves. Bullying may be physical, verbal, or social-relational, or occur in the cyber context. Involvement in bullying is a matter of concern, as it may have negative implications for functioning of perpetrators and victims on individual and contextual levels. Risk factors that consistently correlate with bullying are parenting behaviour and the parent-child attachment relationship. There is limited research investigating the interaction between these constructs in the emergence of behaviour that constitute bullying. Thus, the study had three main objectives, namely (a) to determine whether significant relationships exist between perceived parenting dimensions (acceptance, firm control, and psychological control) and different types of bullying perpetration and victimisation (physical, verbal, social-relational, and in cyberspace); (b) to determine whether these relationships are mediated or moderated by parent-child attachment; and (c) to examine whether there are any significant gender and ethnic differences in different types of bullying perpetration and victimisation.

A total of 1078 white Afrikaans- and black Southern Sotho-speaking preadolescents in Grades 5 and 6 from twenty-four schools across the Free State participated in the investigation. A quantitative, non-experimental type of study was conducted, utilising correlational and criterion group research designs. Data were collected during the second and third school terms by administering measures of bullying, parenting dimensions, and parent-child attachment. Correlational analyses, hierarchical regression analyses, multiple regression analyses, moderated hierarchical multiple regression analyses, models of multivariate analysis of variance (MANOVAs), and analyses of variance (ANOVAs) were used to analyse the data.

The findings suggest that although parenting dimensions significantly correlated with most types of bullying, they explained only a small proportion of the variance. In each case, perceived parental psychological control accounted for the major part of this variance. However, the corresponding effect sizes were found to be small. While attachment mediated most of the relationships between perceived parental acceptance and bullying, it mediated only the associations between firm control and physical and verbal bullying perpetration. Attachment and perceived parental acceptance interacted to influence verbal bullying perpetration. However, regardless of the levels of perceived parental acceptance, preadolescents with a lower quality of parent-child attachment were involved more frequently in verbal bullying perpetration. Attachment neither mediated nor moderated the relationships between perceived parental

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

psychological control and bullying. While no meaningful gender differences were obtained, black Southern Sotho-speaking preadolescents were more involved in physical and verbal bullying perpetration and victimisation compared to white Afrikaans-speaking preadolescents. The results are discussed within a developmental psychopathology framework. Several practical applications of the findings, strengths, and limitations of the study, and areas for future research are highlighted.

Key words: bullying, victimisation, parenting, attachment, preadolescence, gender, ethnicity, mediator, moderator

Chapter 1: Orientation to the Study

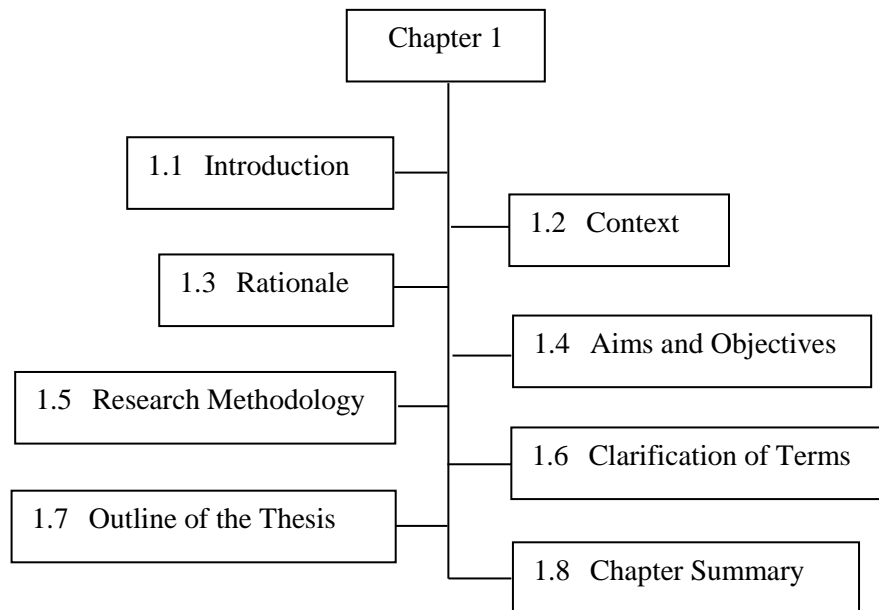


Figure 1. Outline of Chapter 1.

1.1 Introduction

This chapter introduces the research topic and provides an overview of the entire study. The context to the problem of bullying at school is given, as well as the reasons for conducting research that would clarify the roles of parenting dimensions and attachment in the development of bullying perpetration and victimisation. This chapter outlines the research aims and objectives and describe the research design and sample. The measuring instruments used to collect the data, as well as the statistical procedures used to analyse the data, are also presented. Finally, this chapter provides clarification of important terms that are used throughout the research study, and concludes with a brief outline of each chapter. Figure 1 provides a visual summary of the outline of this chapter.

1.2 Context

Exclusive: Family of boy who hanged himself sues Brooklyn Catholic school for ignoring bullying (Carrega & Greene, 2017)

Boy, 13, becomes the third pupil at a school embroiled in a 'bullying' row to be found dead in a year as mother calls for an investigation (Witherow, 2017)

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Bullies force pupil, 15, to quit school (Chetty, 2017)

Girl bloodied in bully attack at Stellenbosch school (Germishuys, 2016)

Newspaper headlines on the topic of bullying at school can be found in abundance internationally and in South Africa. Captions such as those cited above are evidence that a child's fundamental right to a safe and secure learning environment is infringed upon on a daily basis. Even though the phenomenon gained scientific significance during the 19th century, these cited incidents confirm that the subject of bullying is as relevant today as it was back then.

Bullying is a complex phenomenon; consequently, there is a lack of consensus regarding one standard definition of bullying that can fully describe all the different bullying acts and relationships (Sercombe & Donnelly, 2013; Volk, Dane, & Marini, 2014). Nevertheless, the definition put forth by Olweus (2013) is accepted widely amongst different researchers. This definition states that bullying is a type of proactive aggressive behaviour characterised by three general criteria, namely (a) power imbalance in favour of the bully, (b) intent to cause harm, and (c) repetition of this aggressive behaviour over time. Bullying can be conducted or experienced in multiple ways: Whereas traditional bullying encompasses physical (e.g., hitting and kicking), verbal (e.g., teasing and name-calling), and social-relational behaviour (e.g., social exclusion and rumour spreading) (Farrell, Della Cioppa, Volk, & Book, 2014; Griezel, Finger, Bodkin-Andrews, Craven, & Yeung, 2012; Olweus, 1994), cyberbullying refers to the intentional and repeated use of aggressive or hostile acts using information and communication technologies (Belsey, 2006). In spite of the many similarities between traditional bullying and cyberbullying, uncertainty still exists regarding the degree of overlap between these constructs and whether the same definition could apply in both contexts (Antoniadou & Kokkinos, 2015). The current study conceptualises bullying and cyberbullying as repeated, intentional acts of direct or indirect aggression against another learner (or group of learners) whom the perpetrator perceives to be an easy target.

The prevalence rates of both traditional bullying and cyberbullying indicate that it is a serious problem in primary and high schools internationally and in South Africa. Although prevalence rates vary on the basis of several factors (see Chapter 3), some studies report rates to be as high as 18.2% for perpetrators and 39% for victims of traditional bullying; and 15.9% for perpetrators and 30.2% for victims of cyberbullying among primary school learners

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

(Holfeld & Leadbeater, 2015; Jenson, Brisson, Bender, & Williford, 2013; Monks, Robinson, & Worlidge, 2012). Such high prevalence rates for bullying and cyberbullying are cause for concern due to their implications for child and adolescent adjustment. For example, perpetrators and victims of bullying (in either traditional or electronic contexts) present with a variety of psychosocial problems, including symptoms of anxiety and depression, loneliness, posttraumatic stress, low life and school satisfaction, and feelings of alienation or detachment from school (Boyes, Bowes, Cluver, Ward, & Badcock, 2014; Callaghan, Kelly, & Molcho, 2014; Kowalski, Giumetti, Schroeder, & Lattanner, 2014; Lereya, Copeland, Zammit, & Wolke, 2015; Meland, Rydning, Lobben, Breidablik, & Ekeland, 2010). In particular, concern is expressed about the fact that learners who are involved in traditional bullying or cyberbullying in any role (but especially victims of bullying) are at an increased risk of contemplating and attempting suicide (Hinduja & Patchin, 2010; Wu et al., 2015). Furthermore, it would appear that no learner is immune from bullying or its effects, as such behaviour is present in both genders (Boel-Studt & Renner, 2013) as well as in all cultures and ethnic groups (Álvarez-García, García, & Núñez, 2015; Reddy et al., 2013).

Across multiple levels of analyses, several factors are associated with a heightened risk of becoming a perpetrator or victim of bullying. Some of these individual risk factors include age and gender (Álvarez-García et al., 2015), low levels of empathy (Álvarez-García et al., 2015; Jolliffe & Farrington, 2011), as well as deficits in social information processing and poor theory of mind (Shakoor et al., 2012; Ziv, Leibovich, & Shechtman, 2013). With regard to cyberbullying, studies have indicated that factors such as risky and prolonged Internet use (Kowalski et al., 2014; Rice et al., 2015) and previous online victimisation (Antoniadou, Kokkinos, & Markos, 2016) can increase the frequency of becoming involved in such behaviour either as a perpetrator or as a victim. Despite risk factors found at an individual level, numerous social and contextual factors, including ethnicity and parenting, are also associated with traditional bullying and cyberbullying (Álvarez-García et al., 2015; Olweus, 1980).

Parenting can be studied from one of two perspectives: The dimensional (Schaefer, 1965b) and the typological (Baumrind, 1966; Maccoby & Martin, 1983) approaches. According to the dimensional approach (the approach utilised in the current study), children perceive parenting as specific, observable parental behaviour that lies along three orthogonal dimensions: acceptance versus rejection, firm control versus lax control, and psychological autonomy versus psychological control (Schaefer, 1965b; Schludermann & Schludermann,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

1970). In turn, high and/or low levels of these dimensions are associated with traditional bullying and cyberbullying (Atik & Güneri, 2013; Bayraktar, 2012; Bibou-Nakou, Tsiantis, Assimopoulos, & Chatzilambou, 2013; Gómez-Ortiz, Romera, & Ortega-Ruiz, 2016; Kokkinos, 2013; Li, Zhang, & Wang, 2015; Stavrinides, Nikiforou, & Georgiou, 2015). Furthermore, these parenting-bullying associations may vary across gender and ethnic groups (Boel-Studt & Renner, 2013; Hilton, Anngela-Cole, & Wakita, 2010; Shapka & Law, 2013).

Parenting can also be associated indirectly with bullying by way of the parent-child attachment relationship. Through sensitive and responsive caregiving, children develop an enduring emotional bond with their parents known as an attachment bond (Bowlby, 1969). Beyond infancy, this attachment bond is reflected in mental representations (i.e. internal working models) that are used to understand and construct other social interactions or relationships such as peer interactions (Armsden & Greenberg, 1987; Bowlby, 1969). Hence, parenting dimensions influence the quality of the parent-child attachment bond (Beijersbergen, Juffer, Bakermans-Kranenburg, & Van Ijzendoorn, 2012; Cai, Hardy, Olsen, Nelson, & Yamawaki, 2013), which in turn correlates significantly with involvement in traditional bullying and cyberbullying (Bayraktar, Machackova, Dedkova, Cerna, & Ševčíková, 2015; Williams & Kennedy, 2012; You, Lee, Lee, & Kim, 2015). In fact, several studies have confirmed the mediating role of parent-child attachment in the relationships between parenting dimensions and child or adolescent behaviour as a means of explaining how parent-child socialisation practices are generalised to interactions outside the home (Bosmans, Braet, Van Leeuwen, & Beyers, 2006; Gallarin & Alonso-Arbiol, 2012). Instead, several other studies have proposed a moderating effect of parent-child attachment, in that this relationship provides the context in which certain parenting dimensions exert their influence on child developmental outcomes (e.g., Cyr, Pasalich, McMahon, & Spieker, 2014).

Such models of mediation and moderation demonstrate how several constructs (on multiple levels of analyses) interact to lead to problem behaviour or mental disorders, thereby illustrating a core principle of the field of developmental psychopathology (Toth & Cicchetti, 2010). As bullying is a complex phenomenon believed to have multiple developmental origins (Haltigan & Vaillancourt, 2014), the developmental psychopathology model (DPM) would appear to be a promising framework from which to approach the study of bullying. This perspective integrates several theories to highlight the interplay among biological, psychological, and social-contextual processes that account for the pathways by which normal and pathological developmental outcomes may be achieved (Cicchetti, 2006). As it will

become clear in the following section, knowledge on how parenting dimensions and attachment variables interact to give rise to bullying is important in anti-bullying prevention and intervention efforts.

1.3 Rationale

There appears to be an overall decreasing trend of bullying (Chester et al., 2015; Fu, Land, & Lamb, 2016). Despite this positive development however, bullying still occurs at relatively high prevalence rates. This is particularly true for the Free State—a South African province where the current study was conducted. In fact, the Free State consistently remains one of the provinces with the highest rates of bullying victimisation in high schools; with 49.3% in 2002; 44.4% in 2008; and 38.8% in 2011 (Reddy et al., 2003; Reddy et al., 2010; Reddy et al., 2013). Similarly, more than half of Grade 4 to 6 Free State primary school learners have been found to experience some kind of bullying victimisation (Greeff & Grobler, 2008). While research on bullying has increased in South Africa, it is still regarded as limited compared to international literature on the subject. Even where researchers have investigated bullying in South Africa, most studied bullying in high school adolescents rather than in children and preadolescents in primary schools. Preadolescence (the developmental period under investigation in this study) is a critical period in which to study bullying, as preadolescents have been found to be at an elevated risk for engaging in, or experiencing such behaviour (Álvarez-García et al., 2015; Frisé, Jonsson, & Persson, 2007).

High prevalence rates also require further investigations into and refinements of anti-bullying programmes (Walsh & Cosma, 2016). Various researchers (Bowes et al., 2013; Strumpher & Wannenburg, 2014; Wong, Chan, & Cheng, 2014) have advocated for the inclusion of parents in future anti-bullying interventions and for existing programmes to be modified to make the parenting component more intensive. Parenting interventions not only should include arranging parent-teacher meetings and providing parents with information regarding bullying, but programmes also should assist parents in identifying and improving any suboptimal or inappropriate child-rearing behaviour they might display. However, to date, studies have produced inconsistent results regarding the role of parenting dimensions (particularly that of firm control) in the development of bullying, especially with regard to specific types of traditional bullying and victimisation (i.e., physical, verbal, and social-relational) and cyberbullying (Low & Espelage, 2013; Thomas et al., 2016).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Furthermore, the influence of parenting dimensions on preadolescent bullying may vary depending on factors such as gender and ethnicity (Barnett & Scaramella, 2013; Bibou-Nakou et al., 2013; Shapka & Law, 2013). Studying how parent and preadolescent characteristics interact to influence the risk for involvement in different types of bullying is an important topic that researchers have considered only recently. For example, some studies provide evidence that while certain parenting dimensions increase the risk of bullying perpetration and/or victimisation in one gender group, the same dimension has different effects, or even no effect, in the other gender group (Boel-Studt & Renner, 2013; Gómez-Ortiz et al., 2016). Especially in the bullying and cyberbullying literature, studies examining the moderating role of gender are scarce. With regard to ethnicity, it appears that whereas parenting dimensions such as firm and psychological control appear to have a positive influence on child and adolescent outcomes in collectivistic cultures, these same dimensions exert a negative influence in individualistic cultures (Di Maggio & Zappulla, 2014; Janssens et al., 2015; Nunes, Faraco, Vieira, & Rubin, 2013). However, whether similar results would be produced with regard to bullying in different South African cultural groups remains largely unknown.

Even when an association between a parenting dimension and an act of bullying has been well established, the mechanisms through which these parenting factors operate remain unclear. In other words, researchers are still determining the processes responsible for the effect of parenting on preadolescent bullying (i.e., mediators), as well as the conditions under which parenting dimensions will have stronger or weaker effects (i.e., moderators). The construct of attachment, as well as the principles from attachment theory, provides a useful framework for linking parent-child interactions at home to peer relationships (such as bullying) at school. Although several studies have investigated the effects of parenting dimensions and attachment in isolation, only a few have examined the interrelation between these factors, or their specific and combined influence on child and adolescent problem behaviour or well-being (Cai et al., 2013; Cyr et al., 2014; Gallarin & Alonso-Arbiol, 2012; Scott et al., 2013). Even less work has been done in the field of bullying: Although some studies have begun to examine the simultaneous influence of parenting and attachment on bullying (Kokkinos, 2013), to date no study (according to a search on EBSCOhost on 15 January 2017) has determined how attachment interacts with parenting dimensions in order to predict bullying. In other words, the role of attachment—as a mediator or moderator in the relationships between perceived parenting dimensions and bullying—remains unclear.

Another potential area for improving the current South African knowledge base on bullying is by investigating gender and ethnic group differences in bullying involvement. International studies mostly find that whereas males are involved more frequently in bullying in general, as well as in direct bullying more specifically (e.g., physical) (Álvarez-García et al., 2015; Sittichai & Smith, 2015), females are more likely to utilise or experience bullying of a social-relational nature (Arslan, Hallett, Akkas, & Akkas, 2012; Biggs et al., 2010). In contrast, some international studies found no meaningful differences between gender groups regarding bullying (Beckman, Hagquist, & Hellström, 2013; Kelly et al., 2015). Concerning cyberbullying, however, findings even appear to be more inconsistent (Kowalski et al., 2014). Owing to these inconsistencies found in international literature, as well as the fact that limited research on bullying exists in South Africa, it is currently unclear whether gender trends observed in South Africa would reflect the patterns seen in international literature.

Although researchers often include ethnically diverse samples in their investigations, only a few have directly examined whether there are ethnic differences in the levels of bullying perpetration and victimisation. Furthermore, such studies yielded contradicting results: Whereas some studies found higher rates of traditional bullying and cyberbullying in ethnic minority groups (Albdour & Krouse, 2014; Low & Espelage, 2013), others established that learners from ethnic majority groups actually are most often perpetrators and/or victims of bullying (Marcum, Higgins, Freiburger, & Ricketts, 2012; Tippett, Wolke, & Platt, 2013). Still, some studies found no significant differences between ethnic groups with regard to bullying (Connell, El Sayed, Reingle Gonzalez, & Schell-Busey, 2015; Greeff & Grobler, 2008).

1.4 Aims and Objectives

In the light of the discussion above, the current investigation aims to enhance our understanding regarding the role of parenting dimensions and parent-child attachment in the development of different types of preadolescent bullying perpetration and victimisation, including cyberbullying. More specifically, the study aims to determine *whether* and *how* perceived parenting dimensions and attachment can be combined to account for different types of bullying, and whether these relationships are consistent across different genders and ethnic groups.

To achieve these stated aims, specific research objectives of this study were to

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- (a) determine whether significant relationships exist between perceived parenting dimensions (acceptance, firm control, and psychological control) and different types of bullying perpetration and victimisation (physical, verbal, social-relational, and in cyberspace);
- (b) determine whether the relationships between perceived parenting dimensions and bullying are mediated or moderated by parent-child attachment; and
- (c) examine whether there are any significant differences in the means of bullying perpetration and victimisation between the respective gender and ethnic groups.

Prior to investigating the second research objective, the potential moderating effect of gender and ethnicity on the relationships between perceived parenting dimensions and bullying perpetration and victimisation were examined. This would allow the researcher to determine whether the second objective should be conducted on the entire group or for separate gender and ethnic groups.

1.5 Research Methodology

The current study was conducted with observance of several ethical principles, including the principle of best interest (beneficence and non-maleficence), respect (autonomy and confidentiality), justice, fidelity, and integrity. The three research objectives were achieved by utilising a quantitative and non-experimental type of study. The first two objectives made use of a correlational research design, and the third objective involved a criterion group research design. Prior to data collection, consent was obtained from the participating schools, parents, and learners. Data were collected from a multiethnic sample of white Afrikaans-speaking and black Southern Sotho-speaking preadolescents (in Grades 5 and 6) by utilising four measures; including (a) a biographical questionnaire, (b) the Adolescent Peer Relations Instrument: Bully/Target (APRI-BT) (Parada, 2000) to measure bullying, (c) the Child's Report of Parental Behaviour Inventory 30 (CRPBI-30) (Schaefer, 1965b; Schludermann & Schludermann, 1970, 1988) to assess participants' perceptions of parenting dimensions, and (d) the Inventory of Parent and Peer Attachment Revised (IPPA-R) for Children (Armsden & Greenberg, 1987; Gullone & Robinson, 2005) to determine the quality of parent-child attachment relationships. The black Southern Sotho-speaking participants completed the measures in English, and the white Afrikaans-speaking participants were given Afrikaans copies of these questionnaires. The English versions of the consent and assent

forms, the biographical questionnaire, the APRI-BT, the CRPBI-30, and the IPPA-R for Children are included in the appendices. The Afrikaans copies of these documents are available on request. Several statistical techniques and procedures were utilised to analyse the data. These included calculating the descriptive statistics, the reliability coefficients of the measuring instruments, and the Pearson correlation coefficients. Moreover, hierarchical regression analyses, multiple regression analyses, moderated hierarchical multiple regression analyses, models of multivariate analysis of variance (MANOVA), and analysis of variance (ANOVA) were included in the statistical analyses.

1.6 Clarification of Terms

Acceptance versus rejection is a parenting dimension that has also been labelled as support, warmth, nurture, and responsiveness throughout the parenting literature. In the current study, it should be assumed that all these concepts are analogous and used interchangeably throughout the text. Furthermore, this dimension is abbreviated to “perceived parental acceptance” or “parental acceptance” (depending on the context) to simplify the ease of reading.

Bully refers to a learner who engages in bullying perpetration behaviour (Olweus, 1994). However, this term is inherently negative and may label the learner permanently, instead of labelling the behaviour (Finger, Marsh, Craven, & Parada, 2005). Consequently, this label becomes the learner’s identity—defining the type of person he or she is. Furthermore, the label “bully” tends to create a relatively static image of the social dynamics involved in bullying (Thornberg, 2015), when in fact bullying perpetration and victimisation has been known to be reciprocal and mutually reinforcing (Marsh et al., 2011). Thus, the label of “perpetrator” might be more appropriate in describing learners who employ acts of bullying. Nevertheless, as the appropriateness of labels has not yet been debated thoroughly, “bully” will be used interchangeably with “perpetrator” to remain consistent in reporting the findings of other researchers.

Bullying (also known as “traditional bullying” or “face-to-face bullying”) is conceptualised as repeated, intentional acts of direct or indirect aggression against another learner (or group of learners) whom the perpetrator perceives to be an easy target. As the term “bullying” implies the involvement of both a perpetrator and a victim, the terms “bullying perpetration” and “bullying victimisation” will be used to respectively refer to learners

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

involved in a specific bullying role (i.e., perpetrator of bullying or victim). The term “bullying” will be reserved to describe instances referring to the process of bullying as such (i.e., involving both perpetrators and victims of bullying).

Bullying perpetration or **traditional bullying perpetration** are terms that will be used interchangeably. It encompasses all repeated, intentional acts of direct or indirect aggression against another learner (or group of learners) who the perpetrator(s) perceives to be an easy target (Olweus, 2013).

Bullying victimisation, traditional bullying victimisation, or victimisation are terms that will be used interchangeably and refer to a learner’s experiences of repeated, intentional acts of direct or indirect aggression by a perpetrator (or group of perpetrators) who perceives the victim to be an easy target (Olweus, 2013).

Cyberbullying is conceptualised as bullying utilising any electronic device or platform. As the term “cyberbullying” implies the involvement of both a perpetrator and a victim, the terms “cyberbullying perpetration” and “cyberbullying victimisation” will be used to respectively refer to learners involved in a specific cyberbullying role (i.e., perpetrator of cyberbullying or victim). The term “cyberbullying” will be reserved to describe instances referring to the process of cyberbullying as such (i.e., involving both perpetrators and victims of cyberbullying).

Ethnicity or **ethnic group** is used to describe a social group that shares a common culture, language, history, physical appearance, religion, and/or ancestry that sets it apart from another group of people (Markus, 2008). Although the terms “ethnicity,” “culture,” and “race” are often used interchangeably in literature, there are slight differences in their meanings. The current study will refer to “ethnicity” or “ethnic group”, referencing the terms “culture” and “race” when reporting the findings of relevant literature, and only when those authors made use of these terms in the context of their own studies.

Firm control versus lax control is a parenting dimension that will be abbreviated to “perceived parental firm control” or “parental firm control” (depending on the context) for use in the current study to simply the ease of reading. Additionally, this term will be used interchangeably with “behavioural control” throughout the text.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Parent(s), in the context of this study, refers to the person(s) who engage in a broad array of behaviour aimed at meeting the physical, cognitive, and socioemotional needs of a child. However, owing to the diverse range of family composition found in South Africa, this term will be used interchangeably with “caregiver.”

Parent-child attachment is the lasting emotional bond characterised by responsiveness, trust, and availability (Armsden & Greenberg, 1987; Bowlby, 1969). In the context of the current study, the term “child” will refer to the offspring of parents—irrespective of the child’s age. Thus, instead of referring to “parent-preadolescent bond” or “parent-adolescent bond” when discussing preadolescents and adolescents respectively, the researcher attempts to simplify the ease of reading by utilising the term parent-child bond to refer to children in all developmental periods.

Preadolescence (also known as “early adolescence”) is the developmental period between and including the ages of 10 and 12 (i.e., Grades 5 and 6) (Bhana, 2010). As several other authors rather make use of the term “early adolescence”, these two concepts will be used interchangeably in the context of the present investigation.

Psychological autonomy versus psychological control is a parenting dimension will be abbreviated to “perceived parental psychological control” or “parental psychological control” (depending on the context) for use in the current study to simplify the ease of reading.

Victim refers to a learner who is the recipient of bullying perpetration acts (Olweus, 1994). However, Parada (2006) argues that by using the label “victim,” it creates the impression that a victimised learner is a passive individual who, by chance, became a victim of bullying and might be partly responsible for the behavioural choices of those who bully. Such reasoning overlooks the fact that learners who bully are doing so intentionally and that they are likely to purposively bully learners perceived to be easy targets (i.e., weaker in some form). According to Nielsen (in Nielsen, Notelaers, & Einarsen, 2011), a target of bullying is an individual who is continuously exposed to bullying, whereas a victim of bullying is someone who, in addition to such exposure, perceives himself or herself as being victimised. Thus, it would appear that the labels of “target” and “victim” are two distinct constructs within the phenomenon of bullying (Nielsen et al., 2011). As the appropriateness of labels has

not yet been debated thoroughly, “victim” will be used interchangeably with “target” throughout the text to remain consistent in reporting the findings of other researchers.

1.7 Outline of the Thesis

Chapter 1, or the current chapter, serves to orientate the reader to the study by introducing the research topic and providing an overview of the entire study. This overview includes background information regarding the constructs under investigation, the rationale for conducting the research, the research aims and objectives, and the research methodology. The chapter concludes with a clarification of some terms and a brief outline of each chapter.

Chapter 2 explicates the theoretical framework to this study, namely the DPM. Along with its fundamental principles, overviews are given regarding mediation and moderation models, as well as the developmental period of preadolescence. An application of the DPM to the current research study is also provided.

Chapter 3 provides an overview of the current knowledge base on bullying and cyberbullying. Research efforts from international and South African researchers are included. Throughout the chapter, limitations and debates surrounding various topics in the bullying literature are outlined. In this way, gaps in the works on bullying can be identified. Furthermore, this chapter introduces the reader to the measuring instrument that was utilised for assessing bullying and cyberbullying in the current study, namely the APRI-BT (Parada, 2000).

Chapter 4 comprehensively reviews the literature on perceived parenting dimensions, namely (a) acceptance versus rejection, (b) firm control versus lax control, and (c) psychological autonomy versus psychological control. Hereafter, the relations of these dimensions with bullying perpetration and victimisation are discussed critically, including whether these associations differ according to gender and ethnicity. Finally, this chapter provides an overview of the measuring instrument that was used to measure parenting dimensions in the current study; the CRPBI-30 (Schaefer, 1965b; Schludermann & Schludermann, 1970, 1988).

Chapter 5 provides an overview on the construct of parent-child attachment, including its conceptualisation as internal working models, and how it remains an influential factor in the developmental period of preadolescence. In addition, the discussion focuses on the

association of attachment with the different parenting dimensions, as well as with bullying perpetration and victimisation. The chapter concludes with a discussion of the IPPA-R for Children (Armsden & Greenberg, 1987; Gullone & Robinson, 2005), the inventory that was utilised in the current study to measure parent-child attachment.

Chapter 6 integrates the constructs of perceived parenting dimensions, attachment, and bullying in terms of mediation and moderation models.

Chapter 7 first presents the three research objectives, followed by a description of the methodology that was utilised in the present study. This discussion includes the research design, sampling procedures, measuring instruments, and statistical procedures.

Chapter 8 reports the research results for the descriptive and inferential statistical procedures (e.g., correlation analyses, hierarchical regression analyses, multiple regression analyses, moderated hierarchical multiple regression analyses, MANOVA, and ANOVA).

Chapter 9 summarises and discusses the main findings from the statistical procedures, including the frequency of bullying, the correlations between perceived parenting dimensions and bullying, and the moderating role of gender and ethnicity in these relationships. Furthermore, the intervening effect of attachment is investigated, as well as the mean differences between gender and ethnic groups.

Chapter 10 concludes the present study. It highlights the strengths, limitations, and contributions of the current study, as well as its practical applications. Recommendations for future research are also provided.

1.8 Chapter Summary

The current chapter orientates the reader to the context of this study. An outline of the literature review was given, in which the variables of bullying, perceived parenting dimensions, and attachment were discussed. These discussions focused on the definitions of these constructs and the relationships among them. The conceptual framework of the current study—the DPM—was also introduced. Hereafter, attention was given to the rationale of the current study. Based on this rationale, three research objectives were formulated to be investigated in a multiethnic Free State sample of preadolescents. Data were collected utilising four measuring instruments (a biographical questionnaire, the APRI-BT, CRPBI-30, and IPPA-R for Children) and analysed by using several statistical techniques and procedures.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The chapter concludes with a clarification of important terms used throughout the thesis and an outline of each individual chapter. Thorough discussions on each of these sections are presented in the subsequent chapters. To further guide the reader, each chapter opens with a visual summary of the outline of that chapter. The literature review is discussed in Chapters 2 – 6, followed by in-depth discussions regarding the methodology and results of the current study in Chapters 7 and 8. Finally, Chapters 9 and 10 elaborate on the theoretical meaning of the results of the study, as well as the strengths, limitations, contributions, and practical applications of the study.

Chapter 2: The Developmental Psychopathology Model

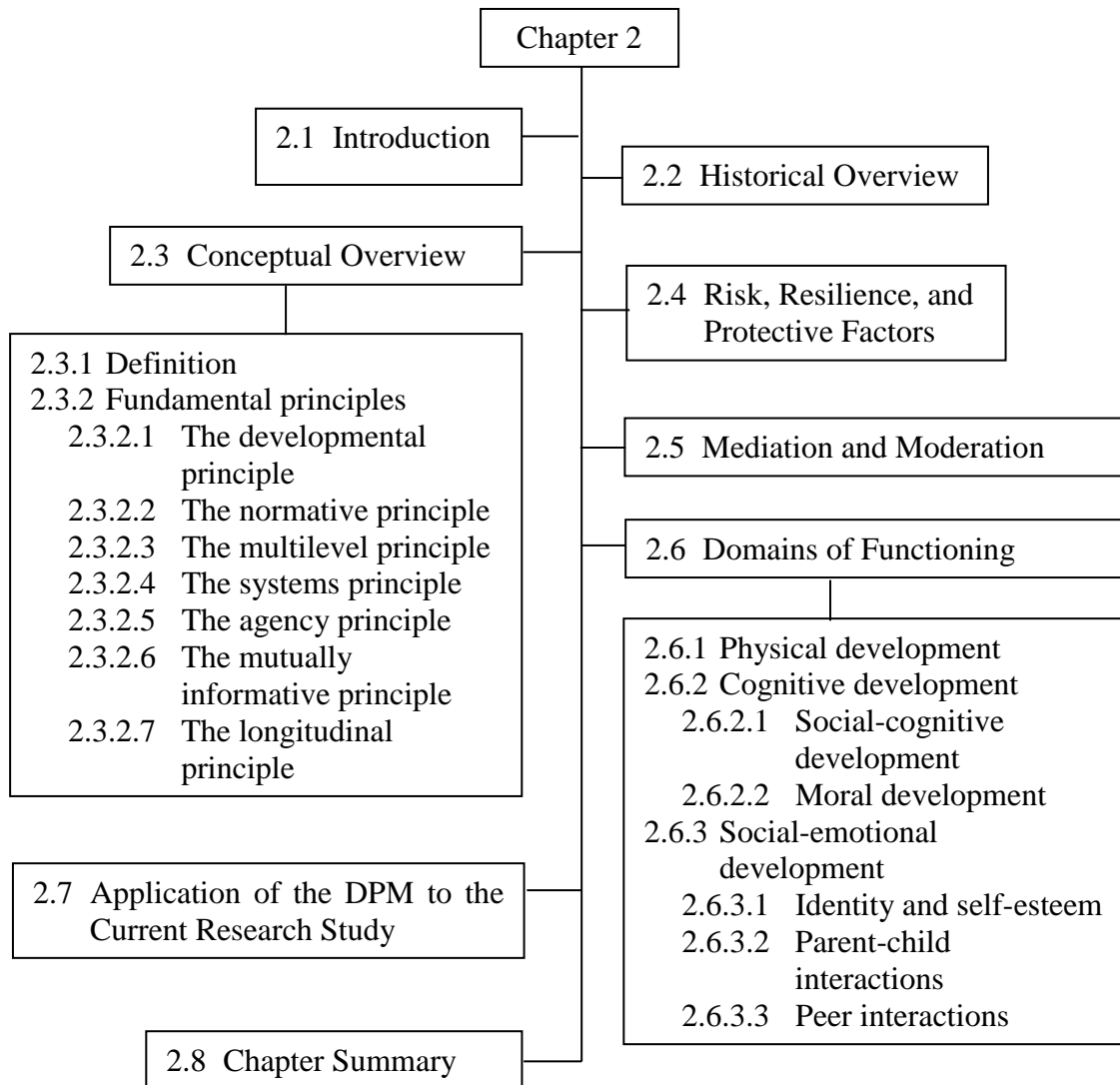


Figure 2. Outline of Chapter 2.

2.1 Introduction

Many psychological phenomena cannot be explained fully through the principles or concepts derived from a single theory. In these cases, it would be better to utilise a conceptual framework rather than a specific theoretical framework to research a particular problem. A conceptual model or framework integrates concepts or existing views from a variety of different sources to understand, explain, or predict a specific phenomenon (Imenda, 2014). One such framework considered important for studying problem behaviour and psychopathology among children and adolescents is the DPM (Drabick & Kendall, 2010).

This chapter begins with a brief overview of the historical roots and development of the DPM. Thereafter, various definitions, fundamental principles (i.e., developmental, normative, multilevel, systems, agency, mutually informative, and longitudinal principles), and major conceptual issues (i.e., risk, resilience, protective, mediating, and moderating factors) of the DPM are discussed. The chapter concludes with discussions regarding the domains of functioning within the period of preadolescence, and how the DPM applies to the current research study. Figure 2 provides a visual summary of the chapter outline.

2.2 Historical Overview

The DPM has its roots in a variety of distinct disciplines, including developmental psychology, traditional academic psychology, psychiatry, clinical psychology, neurophysiology, embryology, physiological psychology, and developmental neurobiology (Cicchetti, 2006). More specifically, it represents a merger between two previously isolated fields, namely academic psychology (utilising a developmental approach to the study of psychology) and clinical psychology and psychiatry (investigating psychopathology in patients) to study children at risk of developing disorders later in life (Masten, 2006). Thus, the DPM served as a framework for combining the strengths of these respective fields. Additionally, prospective longitudinal studies of children at risk for schizophrenia, epidemiological investigations of families displaying disruption with no parental mental disorder, studies of the associations between cumulative risk factors and developmental outcomes, and investigations on the causes and consequences of secure and insecure attachment are only a few examples of studies that were instrumental in the emergence of developmental psychopathology as a distinct field of research in the 1970s (Rutter & Sroufe, 2000; Toth & Cicchetti, 2010).

Many of the separate disciplines portrayed psychopathology as a distortion, degeneration, or exaggeration of normal functioning (Toth & Cicchetti, 2010). Subsequently, a basic theme emerged in that one can only fully understand, prevent, and treat psychopathology by studying an individual's normal functioning and condition. Likewise, an in-depth understanding and investigation of normal biological, psychological, and social processes can be gained by studying the deviations from normal development inherent in pathology (Cicchetti, 2006). Thus, the DPM represents a broad, integrative framework in which various separate disciplines contribute to the understanding of adaptive and maladaptive processes underlying normal and abnormal development. As stated by Cicchetti

(1990), developmental psychopathology should “contribute greatly to reducing the dualisms that exist between clinical study of and theoretical research into childhood and adult disorders, between the behavioural and biological sciences, between developmental psychology and psychopathology, and between basic and applied research” (p. 20).

2.3 Conceptual Overview

2.3.1 Definition. As discussed in the previous section, the DPM is the product of previously distinct disciplines that have unified to understand individual development and functioning (Toth & Cicchetti, 2010). Consequently, researchers and practitioners in this field do not adhere to a specific theory, but instead seek to integrate knowledge across various disciplines and levels of analyses (i.e. biological, psychological, social, and cultural) to understand developmental phenomena (Cicchetti, 2006). In fact, Achenbach (1990) refers to the DPM as a “macro paradigm” in that it does not provide one specific theoretical explanation for the causes or outcomes of disorders, but rather represents a “conceptual framework for organising the study of psychopathology around milestones and sequences in areas such as physical, cognitive, social-emotional, and educational development” (p. 30). In other words, the DPM does not prescribe one specific “micro paradigm” (e.g., biomedical, behavioural, cognitive, or psychodynamic micro paradigm) or theory within these micro paradigms (e.g., genetic, reinforcement, operant, information processing, social cognition, and psychosexual development theory), but instead serves as an overarching framework for integrating different paradigms, theories, ideas and findings that would normally appear unrelated. Thus, the purpose of this macro paradigm is to study psychopathology in relation to key changes that occur across developmental domains throughout the life cycle (Cicchetti, 1990).

Cicchetti (2006) defines developmental psychopathology as an interdisciplinary scientific field that aims to clarify how multiple levels of analyses interact to account for how normal and abnormal developmental outcomes are achieved across the life span. He further states that developmental psychopathology entails an understanding of the interaction of risk and protective factors and processes (both within and outside the person), analysing how developmental tasks can alter the expression of a disorder or even lead to new symptoms, and understanding how the same set of risk factors may result in different difficulties—as determined by the developmental period in which the stressor occurs.

Another definition was put forth by Rutter and Sroufe (2000), who defined developmental psychopathology as attempts to study the origins and course of both adaptive and maladaptive patterns of behaviour, with the aim to understand how these patterns remain continuous or change over time. In other words, this discipline studies individuals who steadily follow a pathway that would result in a disorder, individuals who might temporarily deviate from normal development but then resume the normal developmental pathway, and people who are resilient to factors that would usually lead to some pathology. Put simply by Masten (2006), developmental psychopathology is “the study of behavioral health and adaptation in a developmental context” (p. 47). Despite this definitional divergence, common themes and a consistent set of core principles can be recognised within the multiple descriptions of developmental psychopathology.

2.3.2 Fundamental Principles. To understand the definition of the DPM fully, some of the major principles that have come to characterise this model will now be outlined and discussed. These include developmental, normative, multilevel, system, agency, mutually informative, and longitudinal principles (Masten, 2006).

2.3.2.1 The developmental principle. As developmental psychopathology is largely derived from developmental psychology, this principle states that a developmental perspective is imperative in studying psychopathology to understand, prevent, and treat a disorder (Masten, 2006). Such a perspective emphasises that individual development emerges from complex interactions between various factors and systems across multiple levels. Consequently, individual development may proceed in several directions, with multiple pathways toward as well as away from psychopathology (Hinshaw, 2013). Diversity in developmental processes as well as adaptive and maladaptive outcomes—illustrated by the concepts of equifinality and multifinality—is one of the hallmarks of developmental psychopathology. Individuals with different beginnings may end up on the same developmental trajectory or present with similar disorders; thereby demonstrating the concept of equifinality (Cicchetti, 2006). In other words, distinct (and often interacting) risk factors may yield similar outcomes, as opposed to the assumption that there is only one main pathway to adaptive or maladaptive adjustment (Toth & Cicchetti, 2010). For example, similar psychological and behavioural outcomes can be seen in learners involved in different bullying experiences (i.e., perpetrator versus target, and traditional bullying versus bullying in cyberspace) (Kowalski & Limber, 2013). Likewise, different parenting dimensions (e.g.,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

acceptance and firm control) have been associated with similar positive and negative outcomes in children and adolescents (Di Maggio & Zappulla, 2014; Pinquart, 2015).

In contrast, multifinality is used to explain why individuals presenting with the same risk factor(s) exhibit multiple (different) patterns of adaptation or maladaptation (Cicchetti, 2006). According to this process, any risk or protective factor may operate differently, depending on the presence or absence of additional factors. Thus, the effect of a specific factor will vary among individuals (Hinshaw, 2013). Because of the process of multifinality, early risk factors are deemed as probabilistic rather than deterministic, with some being associated with psychopathology with a high probability and others with a low probability (Cicchetti, 2006). For example, similar childhood experiences (e.g., witnessing domestic violence) may be linked to involvement in different bullying roles (perpetrator versus victim) or different types of bullying (direct versus indirect bullying) (Volk, Craig, Boyce, & King, 2006).

The differential pathway concepts of equifinality and multifinality imply that psychopathology cannot be understood as simply resulting from linear pathways of associations, and disorders cannot be conceptualised as mere categories. Furthermore, these concepts aid in explaining individual pathways of adaptation and maladaptation, and emphasise the importance of conducting process-oriented investigations (Cicchetti, 2006). The developmental principle also states that there are periods (e.g., during transition into adolescence or adulthood) in which rapid changes in the individual and/or context represent a turning point in the direction of adaptive development, creating an acceleration or deceleration in problem behaviour or psychopathology (Masten, 2006). Thus, the presence of protective factors (including therapeutic interventions) in these transitional periods may assist a person rather to deviate from a pathway towards maladjustment onto a trajectory towards being a well-adjusted individual (Cicchetti, 2006).

2.3.2.2 The normative principle. According to the normative principle, psychopathology is defined against what is “normal” in a specific culture or society for an individual of a particular age and gender (Masten, 2006). Such normality can be determined by whether a person achieves certain psychosocial milestones or developmental tasks across the life span. For instance, school achievement is an important developmental task during the school years (Masten, 2006). However, bullying victimisation may affect learners’ concentration span in class and lead to school absenteeism; all of which may affect their

scholastic performance negatively (Burk et al., 2011; Cross, Lester, & Barnes, 2015). In turn, underperformance in school may have long-term consequences, such as behavioural problems, negative self-worth, and lower educational aspirations and unemployment in adulthood (Manrique Millones, Van Leeuwen, & Ghesquière, 2013; Sigurdson, Wallander, & Sund, 2014). Therefore, task attainment can serve as a broad indicator of whether development, adaptation, or adjustment is proceeding well. Failure to achieve one or more tasks may contribute to symptoms of psychopathology and have lifelong consequences, which in turn may further decrease individual well-being (Toth & Cicchetti, 2010).

2.3.2.3 The multilevel principle. As developmental psychopathology is considered a macro paradigm, it is not confined to a singular discipline or level of analysis. In other words, the multilevel principle states that a complete understanding of adaptive or maladaptive behaviour—including its causes and consequences—can be obtained only if processes on multiple levels of functioning are investigated simultaneously (Hinshaw, 2013; Masten, 2006). These levels of functioning exist both within (e.g., genes, cognition, and temperament), as well as outside (e.g., culture, peer relations, and family interactions) a developing individual (Cicchetti, 2006). For example, factors that contribute to the onset or maintenance of bullying may be found in domains of individual functioning (Álvarez-García et al., 2015; Mitsopoulou & Giovazolias, 2015), parent-child interactions and relationships (Bayraktar et al., 2015; Bibou-Nakou et al., 2013), interactions with peer groups (Farmer et al., 2015), as well as within broader contextual levels (Saarento, Garandeanu, & Salmivalli, 2015). Similarly, the detrimental consequences of bullying can be seen at an individual level (Kowalski et al., 2014; Wu et al., 2015), within parent- and peer interactions (Georgiou & Fanti, 2010; Wang, Zhou et al., 2012), as well as in broader contexts such as the school (Jordan & Austin, 2012).

Investigating multiple domains of functioning is imperative because incorrect assumptions regarding human behaviour could emerge if only one level or variable is studied in isolation. Thus, depending on the research questions at hand, problems should be addressed by researchers from a variety of different disciplines (Hinshaw, 2013).

2.3.2.4 The systems principle. The systems principle states that psychopathology arises from multiple, ongoing interactions between systems within individuals (e.g., biological, cognitive, and affective systems), as well as interactions between individuals and the contexts in which they are functioning (e.g., family, peer, school, neighbourhood, and

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

cultural contexts) (Masten, 2006). While traditional theories would conceptualise mental disorders as existing within the individual, developmental psychopathology regards pathology as resulting from continuous relationships between an individual and multiple internal and external contexts (Drabick & Kendall, 2010).

The cultural context is highly emphasised in literature on developmental psychopathology. Owing to the ethnic or cultural diversity among populations (including in South Africa), it is highly important to consider culture to define, understand and treat problem behaviour adequately (Toth & Cicchetti, 2010). For example, ethnicity or culture determines whether certain environmental influences (e.g., parenting behaviour) will have positive or negative effects on child development. While some parenting behaviours contribute toward child psychopathology in one culture, the same behaviours may have no effect or may even be beneficial in another culture (Hinshaw, 2013). For instance, the use of high levels of parental behavioural control or an authoritarian parenting style in collectivistic cultures (i.e. cultures emphasising the needs of others and interdependence) does not necessarily lead to negative developmental outcomes in children and adolescents that would otherwise be found in individualistic cultures utilising similar parental strategies (i.e., cultures that emphasise self-interest and personal autonomy) (Chao & Aque, 2009; Di Maggio & Zappulla, 2014; Lansford et al., 2005). Furthermore, even though many types of psychopathology and problem behaviour are present across ethnic groups at approximately equivalent rates, the risk and protective factors, as well as their interactions, which were involved in the development and expression of these deviant behaviours, may differ cross-culturally (Hinshaw, 2013). Thus, these various interactions between multiple systems and contexts are ultimately responsible for the multiple pathways toward and away from psychopathology, as stated by the developmental principle (Masten, 2006).

The systems principle furthermore highlights that over time, systems may reciprocally influence each other (i.e., transactional processes) (Masten, 2006). In other words, children can influence parents and peers, who in turn further influence the development of the child. As an example, Fanti and Georgiou (2012) demonstrated that children's bullying perpetration predicted lower subsequent positive parenting, whereas children who initially reported high positive parenting reported lower bullying perpetration one year later (i.e., reciprocal influences between bullying and parenting). Likewise, transactional processes may also occur among different internal factors in an individual. Therefore, rather than merely considering the qualities of the current context, understanding the origins of psychopathology requires

knowledge regarding how individual and contextual risk and protective processes have interacted reciprocally over time (Cicchetti, 2006).

2.3.2.5 *The agency principle.* According to the agency principle, people are active agents in their own development (Masten, 2006). In other words, an individual's environment does not create experiences that a person has to endure passively; instead, individuals are actively involved in creating their own experiences and environments (Cicchetti, 2006). As children gradually mature into adolescents, they can choose increasingly and create their own contexts (including friends and activities) in which to spend their time. These choices play a significant role in creating adolescents' experiences, which in turn determine the course of normal and psychopathological development. For instance, children and adolescents who actively pursue affiliation with aggressive peers are influenced negatively by such peers with whom they interact—increasing their involvement in bullying perpetration (Cook, Williams, Guerra, Kim, & Sadek, 2010). This principle of agency also informs the process of multifinality in that an individual's active choices can result in a developmental trajectory that is quite different from that of another person who began on the same initial pathway (Toth & Cicchetti, 2010).

2.3.2.6 *The mutually informative principle.* Developmental psychopathology conceptualises disorders as deviations in typical developmental pathways as opposed to distinct categories (Hinshaw, 2013). Therefore, this principle emphasises that, to gain complete and contextualised understanding of psychopathology, normal developmental pathways would have to be investigated. For example, thorough understanding of preadolescent bullying requires knowledge of how preadolescents normally process information in social situations, as well as of the normative development of empathy, peer hierarchy construction, individuation, and all the physical and emotional changes associated with puberty. Likewise, in turn, studying deviations in typical developmental pathways could enhance understanding of normal developmental processes (Masten, 2006). For example, observing the types of bullying endorsed by the different gender groups can provide information on the socialisation needs and goals for these groups. Bullying resulting from parenting dimensions that aim to control preadolescents' actions directly and/or indirectly will again provide information regarding the salience of their needs for autonomy and individuation.

Therefore, developmental psychopathology integrates the study of psychological disorders with research on normative development and developmental tasks, with progress in each discipline dependent on progress in the other (Hinshaw, 2013). In this way, “theories of normal development can be affirmed, challenged, and augmented by incorporating knowledge about atypical development” (Cicchetti, 2006, p. 11). Additionally, due to practical limitations and ethical concerns associated with research involving humans, studying individuals with problem behaviour or disorders could provide information on development that would otherwise not have been gained through investigation of nondisordered individuals.

2.3.2.7 The longitudinal principle. According to this principle, longitudinal studies are imperative in understanding developmental pathways and processes associated with change (Masten, 2006). By studying bullying from early childhood to late adolescence, information can be obtained regarding how the form of bullying changes with development, and which factors become more or less salient in determining the risk for bullying across periods of development.

In contrast, results from cross-sectional studies cannot illustrate how an individual or mental disorder changes over time (Zahn-Waxler, Crick, Shirtcliff, & Woods, 2006). However, research studies collecting data at only one point in time can still provide valuable information by investigating many different variables at the same time. As developmental psychopathologists are interested in the processes of multifinality and equifinality, examining multiple associations can provide insight regarding which variables are associated with a particular outcome (equifinality), as well as which outcomes are associated with a specific variable (multifinality) (Carter, Marakovitz, & Sparrow, 2006). In this way, initial hypotheses regarding possible processes of development can be provided. In other words, before conducting expensive, time-consuming longitudinal studies on how associations between parenting, attachment, and bullying develop or change over time, initial evidence that states that these variables are in fact associated is needed—even if only at one point in time. Thus, although cross-sectional studies can be valuable for certain purposes, determining variations in the timing and tempo of development and psychopathology necessitates longitudinal data (Masten, 2006).

Apart from the fundamental principles described in this section, additional major conceptual issues emphasised by developmental psychopathologists include identifying risk

and protective factors, as well as mediation and moderation models, which are discussed in the sections to follow.

2.4 Risk, Resilience, and Protective Factors

Developmental psychopathology aims to understand the nature and the course of mental disorders; thus, one of its fundamental goals is to identify individual and contextual risk factors that would predict such problem behaviour in different developmental periods (Hinshaw, 2013). To establish a factor as a risk for unwanted behaviour, there must be evidence that this factor was present before the onset of such behaviour (Cicchetti, 2006). This would allow the risk factor to predict a later outcome. Merely identifying a factor that operates at the same point in time as a negative outcome would allow that factor to be characterised only as a correlate of the outcome. Thus, owing to the simultaneous assessment of the factor and the outcome, it would not be possible to conclude whether the factor contributed to the onset of the outcome, or whether the outcome led to that factor. To establish whether a factor was present prior to the outcome, longitudinal studies would be required.

In addition to identifying risk factors, developmental psychopathologists also aim to investigate protective factors—variables that alleviate risk and are associated with outcomes that are more positive (Hinshaw, 2013). Identifying these protective factors is important in the study of resilience; the process through which individuals are able to function successfully despite exposure to chronic stressors (Cicchetti, 2006). In this manner, “resilience provides information on conditions under which established risk factors are not associated with negative outcomes” (Vanderbilt-Adriance & Shaw, 2008, p. 887). Several factors have been identified as protective in nature, including parenting dimensions and attachment relationships (Vanderbilt-Adriance & Shaw, 2008). Identifying protective factors can subsequently improve prevention and intervention efforts, as such factors may be incorporated within treatment programmes so that the number of protective factors outweighs the risk factors (Toth & Cicchetti, 2010). Consequently, the present investigation determines whether parent-child attachment relationships could alleviate the effects of exposure to stressors such as inappropriate parenting behaviour (e.g., high levels of parental control) to improve the quality of anti-bullying interventions.

2.5 Mediation and Moderation

In addition to identifying risk and protective factors associated with problem behaviour, developmental psychopathologists are also particularly interested in determining how these constructs interact to lead to a mental disorder (Cicchetti, 2006). Therefore, researchers often use models of mediation and moderation to clarify the role of multiple variables in the development of normal or pathological behaviour.

A mediator serves as an explanatory link in the relationship between a predictor variable and a criterion variable (Ialongo et al., 2006). Stated differently, a mediator is the mechanism through which the predictor variable is able to affect the criterion variable, thus explaining “how” and “why” constructs lead to pathways of normal or abnormal development. In some cases, the same construct can function either as a mediator or as a moderator, thereby allowing researchers to test competing theories about developmental pathways and reach a conclusion on which theoretical model best explains the relationship observed among constructs.

In contrast, a moderator is an intervening variable that influences the direction or strength between two constructs; thus determining whether the relationship between a predictor variable and a criterion variable is similar across groups or circumstances (Ialongo et al., 2006). In other words, moderators provide information regarding the generalisability of findings to other groups. Furthermore, moderators allow researchers to acknowledge the complexity of behaviour and relationships (i.e., individuals are not the same) and to identify the groups of people who would benefit from the findings or intervention (MacKinnon, 2011). Thus, knowledge of mediators and moderators can assist researchers and clinicians in respectively identifying the mechanisms through which prevention or intervention programs can achieve positive outcomes, and who will most likely benefit from these programmes (Ialongo et al., 2006; MacKinnon, 2011).

From the discussions above, it is evident that developmental psychopathology is a conceptual framework that investigates the interaction among multiple variables to understand the origins and development of problem behaviour and psychopathology better. The onset, acceleration, and deceleration of such problem behaviour are especially associated with periods of developmental transition, in which there are drastic changes in the individual and/or environment (Masten, 2006). Hence, the DPM would be useful in examining

developmental transition points such as the transition into adolescence (Toth & Cicchetti, 2010). The current study focuses on the period of preadolescence; therefore, this developmental stage according to the various domains of functioning; namely the physical, cognitive, and social-emotional domains, is outlined in the next section.

2.6 Domains of Functioning

2.6.1 Physical development. Middle childhood typically refers to the period between 6 and 12 years of age, with the beginning of puberty separating childhood from adolescence (Bhana, 2010). However, children aged 10 to 12 years have been distinguished further as being in “preadolescence” (“early adolescence”), a brief but intense period marked by a series of changes, including the physical transformations associated with puberty and changes in family and peer relationships (Bhana, 2010; Wigfield, Lutz, & Wagner, 2005). In turn, these changes may influence developmental outcomes either positively or negatively.

Puberty is a process involving physical and physiological changes in primary and secondary sexual features, with the result that the individual is reproductively competent (Ellis et al., 2012). Preadolescents experience pubertal, maturational changes that have been designated as “prepuberty”—describing physical changes that precede and prepare for menarche in girls and ejaculation in boys, in turn allowing sexual intercourse to be able to proceed (Wieder, 2001). Although primary and secondary sexual characteristics mature during this period, the appearance of the secondary sexual features mainly distinguishes the preadolescent body representation from that of a child. The development of these features—including the development of breasts in a girl, the enlargement of the penis and testicles in a boy, and the growth of pubic hair in both sexes—is triggered by an increase in hormonal levels (Wieder, 2001).

Apart from the hormonal changes that occur during puberty, studies are increasingly focusing on how the brain is remodelled during puberty and adolescence. At puberty onset, the brain activates the secretion of gonadotropin releasing hormone, which results in an increase in steroid hormones (Sisk & Foster, 2004). These steroid hormones in turn, can change the structure of the brain (e.g., myelination and number of neurons) as well as the activity of certain neural systems (e.g., circuits underlying reproductive behaviour) (Peper & Dahl, 2013; Sisk & Foster, 2004). For example, grey matter volume increases and reaches its peak at about 11 or 12 years, whereafter it decreases again (Blakemore, 2012). Increased

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

intracortical myelination is one possible reason accounting for these age-related decreases in grey matter volume, resulting in an increase in white matter volume (Herting & Sowell, 2017). Another possibility includes synaptic proliferation at puberty, with synaptic pruning accounting for the gradual decrease in grey matter density during adolescence (Blakemore, 2012). It has also been demonstrated that several physical markers for puberty (e.g. facial hair and breast development) had unique associations with the volumes of certain brain structures—illustrating how pubertal hormones may be related to grey and white matter volumes (Herting & Sowell, 2017). Together, these findings illustrate how both the physical and hormonal changes that occur during puberty closely align with the changes observed within grey and white matter. Apart from its influence on brain structure, pubertal hormones may also influence the neural activity underlying social and affective processing, including activity within the striatum, amygdala, and prefrontal cortex (Peper & Dahl, 2013). These structures are respectively involved in reward processing, processing of emotional stimuli, and social-cognitive reasoning; thereby sensitizing preadolescents to their social worlds so that they can achieve the developmental milestone of achieving adult levels of social competence.

In studying preadolescent bullying, it is important to consider the role of puberty as it may influence such behaviour either directly or indirectly. Changes in the levels of hormones (i.e., increased testosterone), increased stress reactivity of hormones, and increased activity within certain brain structures may contribute directly to bullying by increasing emotional negativity, aggression levels, and sensitivity or reactivity to social rewards (Herting & Sowell, 2017; Marceau, Dorn, & Susman, 2012; Perry & Pauletti, 2011). Puberty may also alter child or parent behaviour, which in turn affects involvement in bullying (Paikoff & Brooks-Gunn, 1991). In this way, puberty is related to bullying indirectly. For example, the biological changes associated with puberty alter preadolescents' physical appearance, signalling reproductive and social maturity. In turn, this will result in changes in the expectations that parents and preadolescents may have for each other, including how they should interact with each other (Paikoff & Brooks-Gunn, 1991). In other words, the physical changes associated with puberty may provoke parents to respond differently to their preadolescents, who in turn adjust their behaviour accordingly. For example, the development of secondary sexual characteristics such as breasts in girls may invite more male attention. Together with increased heterosexual interaction (Perry & Pauletti, 2011), a parent may notice these changes and react by becoming more controlling or overprotective. In turn, the preadolescent may

respond to such parental behaviours by engaging in or becoming a target of bullying perpetration (Lereya, Samara, & Wolke, 2013; Stavrinides et al., 2015). Thus, depending on how parents adjust or do not adjust their reactions toward preadolescent biological and behavioural changes, the parent-child interactions (and the quality of the relationship) will be positive or negative—contributing to preadolescent bullying. Overall, hormonal changes are highly significant to understanding how parent-child interactions and relationships transform during preadolescence—a developmental period during which bullying also increases coincidentally.

2.6.2 Cognitive development

2.6.2.1 Social-cognitive development. Apart from physical transformations, preadolescents also undergo various cognitive and social-cognitive changes. For example, improvements in working memory and metacognitive competencies enable the transition from concrete to abstract thinking (Santamaría, Tse, Moreno-Ríos, & García-Madruga, 2013). This would allow preadolescents to engage in logical, analytical reasoning, thereby enabling them to engage better in abstract thinking, consider hypothetical situations, and process information at an advanced level (Wigfield et al., 2005). Additionally, advances in social-cognitive abilities (e.g., theory of mind) are also evident during preadolescence—especially in girls (Čavojová, Belovičová, & Sirota, 2011). Theory of mind refers to the ability to understand and predict others' behaviour based on their mental states (e.g., thoughts and emotions) (Shakoor et al., 2012). The development of social cognition and theory of mind may be influenced by perceived parenting dimensions (Pavarini, De Hollanda Souza, & Hawk, 2013) and the quality of parent-child attachment (Dykas & Cassidy, 2011). In turn, poor social cognition and theory of mind have been linked to involvement in bullying (e.g., Shakoor et al., 2012). However, others argue that learners involved in bullying, specifically perpetrators, may even possess advanced levels of social cognition or theory of mind—using these skills to their advantage to manipulate or exploit others (Sutton, Smith, & Swettenham, 1999).

2.6.2.2 Moral development. As children approach adolescence, they gradually develop more advanced capacities for moral reasoning as well as standards for their own moral conduct (Hymel & Bonanno, 2014). According to Piaget (2007), when children reach the age of 10 or 11, their moral thinking undergoes a series of changes as they begin to base their judgements on a person's intentions rather than on the consequences of an act, coming to realise that rules are not absolute but can be changed. Similarly, Kohlberg (in Colby et al.,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

1987) stated that, beginning in preadolescence, increasingly more children reason from the level of conventional morality in which rules and social expectations have been internalised (i.e., making decisions based on what actions will be approved socially).

These stage theories suggest that individuals' behaviour is the consequence of their moral reasoning. Yet, there are incidents in which individuals do not act according to their moral principles. This asymmetry between moral reasoning and moral behaviour can be explained by the concept of moral disengagement, a term introduced by Bandura (1999). Moral disengagement refers to cognitive strategies employed by individuals (e.g., cognitive restructuring and disregarding the consequences) to justify their involvement in immoral behaviour (Bandura, 1999; Bauman & Bellmore, 2015). During the course of preadolescence, the use of moral disengagement may increase in frequency (Caravita, Sijtsma, Rambaran, & Gini, 2014). Moral disengagement is especially relevant to literature on bullying; with both perpetrators and victims (in the traditional and cyber domains) exhibiting higher levels of this construct (Kowalski et al., 2014; Zych, Ortega-Ruiz, & Del Rey, 2015). In other words, learners involved in bullying (especially perpetrators) may use moral disengagement strategies to justify their behaviour against others, and may also minimise negative emotions such as guilt or shame associated with the bullying acts (Monks & Smith, 2006; Tanrikulu & Campbell, 2015).

Studies have shown that the experience of early parental rejection contributes to the development of moral disengagement, as it exposes children to attitudes or beliefs that tolerate the use of antisocial behaviour (Hyde, Shaw, & Moilanen, 2010). Furthermore, if parents utilise moral disengagement strategies, these may be reflected in their disciplinary techniques (Camodeca & Taraschi, 2015). For example, parents who do not blame or punish their children for a wrongful act may in fact teach them that misbehaviour can be justified and blame can be shifted, leading to increased aggressive behaviour. In contrast, adolescents securely attached to their parents are less likely to hold beliefs endorsing antisocial acts (Dane, Kennedy, Spring, Volk, & Marini, 2012). These authors argue that, because securely attached adolescents care about pleasing their parents, want to develop mutual cooperation, and maintain a positive relationship, they are more receptive and accepting of their parents' moral messages—including beliefs that antisocial behaviour is wrong.

2.6.3 Social-emotional development

2.6.3.1 Identity and self-esteem. Preadolescents increasingly strive for more autonomy to explore their expanding world and develop their own personal identity (Wieder, 2001). Identity development involves exploring and subsequently adopting various roles, activities, values, and relationships (Wigfield et al., 2005). Thus, preadolescents are particularly sensitive to any factors that may hinder their development as autonomous individuals. For example, researchers have found that parental psychological control—a form of control that prevents preadolescents from developing as individuals separate from their parents—is associated with negative outcomes (including preadolescent bullying) over and above the effects of other forms of control (Li et al., 2015; Nelson & Coyne, 2009). In fact, any parenting behaviour that preadolescents would perceive as overprotectiveness could result in problem behaviour (Bibou-Nakou et al., 2013; Kokkinos, 2013).

Furthermore, factors such as gender and ethnicity are also important to a preadolescent's emerging identity. In a seminal study conducted by Hill and Lynch (1983), it has been suggested that preadolescent boys and girls experience increased pressure to identify with and adopt the characteristics of traditional gender roles (i.e., dominance and competitive interactions among boys; nurturance and affiliation among girls). These findings have also been replicated by studies that are more recent (e.g., Simmons & Blyth, 2009). Thus, it can be hypothesised that such conformation may in turn explain why the gender groups are involved in different types of bullying more frequently: Boys are more often engaged in direct, overt displays of bullying to demonstrate their physical power and status, whereas girls tend to be involved in indirect forms of bullying to control or damage that which they value most—social relationships (Álvarez-García et al., 2015; Arslan et al., 2012). Furthermore, because of the physical and cognitive changes, preadolescents experience a decline in their self-esteem (Robins & Trzesniewski, 2005), which in turn has been identified as a risk factor for both bullying perpetration and victimisation (Álvarez-García et al., 2015; Cassidy, 2009).

2.6.3.2 Parent-child interactions. To form their own identity, adolescents would need to explore different activities and roles and negotiate various activities and relationships (Wigfield et al., 2005). Consequently, they gradually become emotionally detached from their parents, as evidenced by the increase in the number and intensity of fighting between parents and preadolescents regarding the rules and the child's level of self-sufficiency (Rew, Principe, & Hannah, 2012). Although preadolescents become more autonomous and increasingly rely

on their peers to satisfy their emotional needs, parents are not yet relinquished completely as attachment figures (Gorrese & Ruggieri, 2012; Scharf & Mayselless, 2007). The importance of parents in this developmental period is evidenced by several studies demonstrating how parent-child attachment continues to affect preadolescent well-being and problem behaviour significantly, including bullying (e.g., Klomek et al., 2016; Laghi, Pallini, Baumgartner, & Baiocco, 2016). Further elaboration of the association between attachment and bullying is provided in Chapter 5.

2.6.3.3 Peer interactions. As children reach preadolescence, they are part of numerous social worlds, including the family, school, same-sex groups, and cross-sex interactions (Fine, 1986). Therefore, they would need to cope with being exposed to an expanding world that may include an increased number of stressors such as new people, places, and expectations. During preadolescence, the structure of the peer group becomes more differentiated with nearly all interactions taking place in the context of a clique. Consisting of 3 to 10 children, a clique is a relatively homogenous group comprised of individuals who are similar in terms of gender, ethnicity, aggression, bullying, and school performance (Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006).

Belonging to a peer group or clique may satisfy two socioemotional goals that are important during preadolescence: social status and affection (Huitsing, Snijders, Van Duijn, & Veenstra, 2014). Social status or perceived popularity refers to one's relative position in the peer hierarchy, with preadolescent boys acquiring such status through their athletic ability and toughness, and girls' gaining social standing based on their physical appearance and social skills (Ruble, Martin, & Berenbaum, 2006). Cliques emphasise inclusion in and exclusion from the peer group—causing preadolescents to develop heightened insecurity regarding their social status and acceptance by peers (Parker et al., 2006). Consequently, such fears prompt preadolescents to invest much of their time in building up their social position and guard against rejection. Together with an affiliation with peers who similarly engage in bullying perpetration (Farmer et al., 2015), this emphasis on improving one's social status in the peer hierarchy may contribute to increased bullying perpetration (Coertze & Bezuidenhout, 2013).

A second major goal during preadolescence is affection, or forming a close relationship with others (Huitsing et al., 2014). Preadolescents gradually replace their parent as being the main figure to whom they direct their attachment needs, and instead develop a need to form a warm, intimate bond with another same-sex peer—a relationship considered prototypical of

later romantic relationships (Parker et al., 2006). This need to establish close relationships with same-aged peers may however result in unfavourable social behaviour. For example, individuals may engage in gossiping (a form of relational aggression) to establish more intimate relationships (Chua & De la Cerna, 2014). The following section focuses on the rationale for utilising the DPM as the conceptual framework in the present study.

2.7 Application of the DPM to the Current Research Study

Across studies investigating the phenomena of bullying perpetration and victimisation appears to be a lack of consensus regarding an overarching theoretical or conceptual framework. The current research study will make use of the DPM as a conceptual framework, as it is believed that bullying can have multiple developmental origins that may interact with a variety of contextual factors to give rise to such behaviour (Haltigan & Vaillancourt, 2014). Furthermore, seeing that a general theory of bullying is yet to be proposed (Farrington & Ttofi, 2009), integrating various theories and perspectives (as has been done by the DPM) would appear to be a promising approach to understand the development of bullying.

It should be noted however, that bullying behaviours are not defined as separate mental disorders in the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5), mainly because bullying has been found to be associated with several disorders already listed in the DSM-5 (e.g., conduct disorder, oppositional defiant disorder, and attention-deficit hyperactivity disorder) (Arıcak, 2016). In fact, the view that bullying perpetration is purely a maladaptive form of behaviour has been challenged by researchers who propose that bullying could serve an adaptive purpose for some individuals (Volk, Camilleri, Dane, & Marini, 2012). Cicchetti (2006) writes that “adaptive and maladaptive may take on differing definitions depending on whether one’s time referent is immediate circumstances or long-term development” (p. 3). Thus, in some contexts, bullying may serve an immediate (adaptive) function of increasing social dominance and popularity within the peer group. However, bullying behaviours have also been consistently linked to negative mental health outcomes over time (Cluver et al., 2010; Copeland, Wolke, Angold, & Costello, 2013; Vaughn et al., 2010). As a result, the current study views bullying as problematic behaviours that serve as potential risk factors for developing other mental health symptoms and disorders.

By using the fundamental principles of developmental psychopathology, research questions can be formulated clearly and investigated. For example, the current research study

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

aimed to determine the role of attachment in the relationships between perceived parenting dimensions and bullying among preadolescents. To achieve this goal, the study first set out to determine whether there were significant correlations between three perceived parenting dimensions (i.e., acceptance, firm control, and psychological control) and different types of bullying perpetration and victimisation (physical, verbal, social-relational, and in cyberspace). Next, the potential effect of gender and ethnicity on the relationships between perceived parenting dimensions and bullying was investigated. Subsequently, the role of attachment as a mediator or moderator in these correlations between perceived parenting dimensions and bullying was investigated. Finally, this study set out to determine whether there were significant differences in the means of bullying perpetration and victimisation between the different gender and ethnic groups.

In essence, this study aimed to investigate the interactions among multiple variables (i.e., individual parenting dimensions, attachment, gender, and ethnicity) to provide hypotheses regarding potential developmental pathways toward involvement in different forms of bullying perpetration and victimisation during an important developmental transition period (i.e., preadolescence). In other words, this study examined how multiple factors at various levels of analyses jointly contribute to the risk for maladaptive behaviours (i.e., bullying perpetration and victimisation), which in turn are linked with the development of psychopathology. Such investigations illustrate some of the core principles of developmental psychopathology. For example, this perspective highlights the interaction among variables across levels of analyses. Accordingly, the study analysed how individual (gender and attachment) and contextual variables (parenting behaviour and ethnic group classification) interact to bring about different types of bullying perpetration and victimisation. Although attachment refers to the relationship between a parent and a child, it is generally considered to be a characteristic of the child (and thus reflected on an individual level of analysis), as it is defined as the child's perception regarding the quality of a relationship (G. Bosmans, personal communication, March 22, 2017). Furthermore, investigating the potential moderating effect of gender and ethnicity would provide clarity on whether the observed relations between parenting dimensions, attachment, and bullying could be generalised to all groups, or whether the interactions among these variables were gender or ethnicity specific. The latter finding could potentially suggest that the development of bullying and victimisation differs across contexts. Such results would inform clinicians and programme developers whether the same anti-bullying interventions and/or programmes would be equally effective across diverse

groups of individuals. Moreover, the research was guided by the concepts of equifinality and multifinality to determine whether different variables or processes would result in a specific form of bullying (equifinality), or whether the same variables or interaction of variables would lead to different bullying outcomes (e.g., whether attachment, gender, and ethnicity would interact with one specific parenting dimension similarly for different types of perpetration or victimisation) (multifinality).

2.8 Chapter Summary

This chapter discussed the DPM as the conceptual framework, including the reasons for selecting this model for use in the current research study. The DPM can be regarded as a macro paradigm that is not limited to a specific set of variables or explanations to understand normal and abnormal functioning. Although many assumptions of this approach can also be found in other fields that study mental disorders, the integration of the various concepts distinguishes developmental psychopathology from other disciplines. Therefore, this approach provides the conceptual scaffolding that enables multidisciplinary integration aimed at expanding, rather than restricting one's understanding of problem behaviour and psychopathology.

Six fundamental principles, including developmental, normative, multilevel, system, agency, mutually informative, and longitudinal principles, underscore the DPM. Another major conceptual issue in developmental psychopathology involves identifying risk, resilience, and protective factors across numerous levels of analysis to understand the onset and course of normal and maladaptive behaviour. These researches are particularly interested in how multiple factors (across various domains) interact to determine the course of development. Therefore, emphasis is placed on investigating mediators and moderators that would provide insight into the mechanisms of developmental pathways, as well as the conditions that would affect the efficacy of treatment. The objectives of the current study revolve around principles in the field of developmental psychopathology, as this framework emphasises that any observed parenting effects on outcome behaviours must account for factors that could mediate or moderate this association. Furthermore, this study was conducted with preadolescent individuals—an important developmental period marked by changes in various domains, including the physical (i.e., puberty), cognitive (i.e., social cognition and moral development), and socio-emotional domains (i.e., individuation, changes in self-esteem, parent and peer interactions).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The remainder of the literature review will focus on each of the major variables included in this investigation (i.e., bullying, perceived parenting dimensions, and attachment); concluding with a chapter that integrates these variables into models of mediation and moderation.

Chapter 3: Bullying Perpetration and Victimization

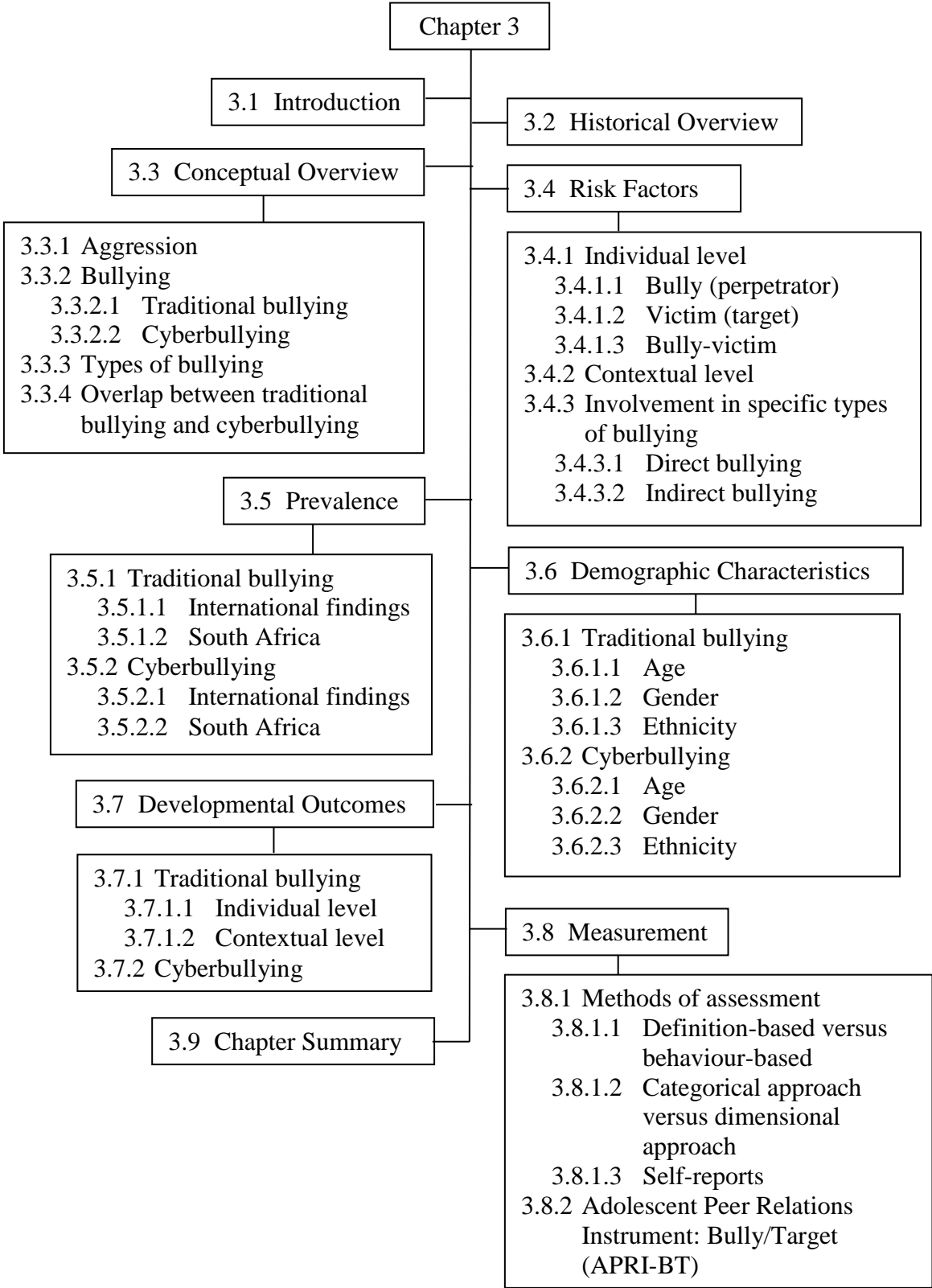


Figure 3. Outline of Chapter 3.

3.1 Introduction

In this chapter, an overview is given of the phenomena of traditional bullying and cyberbullying. Firstly, a brief historical overview of bullying is provided, followed by an outline of the relative position of bullying in literature on child and adolescent aggression. Next, the definitional components of traditional bullying and cyberbullying, the various types of bullying, and the arguments surrounding the degree of overlap between these two forms of bullying are discussed critically. Thereafter, literature regarding the individual and contextual risk factors for perpetrators and victims of bullying and the risk factors for involvement in specific types of bullying are reviewed. Additionally, international and South African prevalence rates for traditional bullying and cyberbullying are discussed. There is also a review of some of the most commonly cited demographic factors in the literature on bullying (e.g., age, gender, and ethnicity), together with an investigation of the effects of bullying on child and adolescent development. Finally, the concept of measurement; including the definition-based and behaviour-based approaches to measurement, whether bullying is assessed better in terms of categories or dimensions, as well as the available methodologies to measure bullying (e.g., self-reports) are discussed briefly. The chapter concludes with an overview of the reasons for having considered the APRI-BT as most appropriate for the current research study. The outline for this chapter is depicted visually in Figure 3.

3.2 Historical Overview

Although much attention has been given to bullying in the media and contemporary research, it is not a new phenomenon. The English term “bullying” first gained significance through a semi-autobiographical book written by Thomas Hughes and published in 1857 (Smith, 2016). However, scientific work on the topic was non-existent at the time, most likely because bullying was considered a normal part of a school learner’s life (Koo, 2007). The first journal article of note that discussed bullying, titled *Teasing and Bullying*, was written by Frederic Burk (in Smith, 2016) in 1897. However, since Burk's article, not much attention has been given to the nature and prevalence of bullying.

It was only again in the 1970s that Swedish physician Peter-Paul Heinemann made use of the terms “mobbing” or “mobbing” to describe bullying behavioural patterns in Swedish schools. A term borrowed from ethologist Konrad Lorenz, “mobbing” originally described the aggressive conduct of animals but was later applied to the behaviour of school children in

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

which a group would suddenly act aggressively towards a child of perceived deviance (Olweus, 2010). Therefore, the concept of mobbing emphasised group engagement, advocating that children are bullied mostly by large mobs. Seeing that this phenomenon occurred less often relative to attacks by single individuals or small groups, Professor Dan Olweus (a Norwegian psychologist) realised that the term “mobbing” could not describe adequately what was happening in Swedish schools. Furthermore, he expressed concern that the word “mobbing” would emphasise only those circumstances that are determined temporarily and situationally. Subsequently, he extended the definition of mobbing to include events that appeared to occur more frequently and in which a learner is exposed to aggression over a period, and he replaced the term “mobbing” with “bullying” (Olweus, 1994, 2010). Other terms include traditional or face-to-face bullying (Robson & Witenberg, 2013; Shetgiri, 2013). In essence, many regard Olweus as the first to conduct large-scale empirical research on bullying. The results of his efforts, including a comprehensive definition of bullying, a self-report questionnaire with which to assess bullying, and an anti-bullying programme to combat bullying are used in countries all over the world (Luxenberg, Limber, & Olweus, 2015; Olweus, 2013).

According to Smith (2011), the 1970s and 1980s could be regarded as the first wave of research in the field of bullying, representing the origins of scientific research in this regard. During the second wave (late 1980s to mid-1990s) and third wave (mid 1990s to early 2000s), research on bullying became more abundant and international (Peterson & Rigby, 1999; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996; Smith, 2004). Further advancements during these periods include the use of alternative methods to survey bullying incidents (e.g., peer nomination method), broadening the definition of bullying to include indirect (e.g., social-relational) forms of bullying, and emphasising additional participant roles in bullying (e.g., assistants of bullies, defenders of victims, and outsiders) (Smith, 2011). The fourth and final wave is marked by the increased use of technology and the emergence of social media in the early 2000s, giving way to the phenomenon of cyberbullying (Smith, 2016). Subsequently, methodologies in traditional bullying research had to be adjusted to include this new form of bullying.

The following section provides a theoretical discussion of the concept of bullying in a traditional context and in the context of cyberspace. However, to appreciate its position in the literature on aggression, a brief overview regarding general aggression is provided first.

3.3 Conceptual Overview

3.3.1 Aggression. Aggression has been defined as behaviour intended to harm or discomfort others (Berkowitz, 1993). Researchers have long made a distinction between two forms of aggression, namely reactive and proactive aggression (Dodge & Coie, 1987). Whereas reactive aggression—rooted within the frustration-aggression model—involves a defensive reaction to a perceived frustration or threat, proactive aggression is goal-orientated, deliberate, and regarded as acquired instrumental behaviour driven by external reinforcement and rewards (social learning theory). Furthermore, two different forms of proactive aggression have been identified (Rigby, 2006). Firstly, proactive aggression may be instrumental, whereby an individual aims to possess another's objects or territory. The second form of proactive aggression is bullying, which instead aims to intimidate or dominate other people. This form of aggression is the focus of this study.

3.3.2 Bullying

3.3.2.1 Traditional bullying. The pioneering work conducted by Olweus gave rise to one of the most influential definitions of bullying used today. This definition underwent several refinements, but the current definition states “bullying is thus aggressive behaviour with certain special characteristics such as an asymmetric power relationship and some repetitiveness” (Olweus, 2013, p. 756). He adds that “most bullying occurs without apparent provocation on the part of the targeted child or youth” (Olweus, 2013, p. 756). Numerous researchers have expanded or modified this definition (e.g., Sercombe & Donnelly, 2013; Tattum, 1997; Volk et al., 2014); resulting in a lack of consensus regarding one standard definition of bullying. Despite the variability across these definitions, certain elements are present in the majority, including the intention to harm, repetition, power imbalance, provocation, and victim distress (Goldsmid & Howie, 2014). Even though these criteria are used widely, disputes still exist regarding their definition, relevance, and practical application.

The first criterion states that the perpetrator intends to inflict harm upon another. Most researchers, as well as the public, agree with this criterion (Cuadrado-Gordillo, 2012; Goldsmid & Howie, 2014; Mishna, Pepler, & Wiener, 2006; Sercombe & Donnelly, 2013). However, this criterion could be regarded as highly subjective in that the views of the perpetrators, targets, and bystanders may differ. Consequently, researchers such as Rigby (2006) distinguished between malign bullying (i.e., bullying that is carried out intentionally

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

and maliciously, providing the perpetrator with much gratification) and non-malign bullying (i.e., behaviour that would be regarded as an act of bullying by others, but in which the perpetrator did not intend to hurt the victim). In spite of this subjectivity, as well as the required self-awareness and honesty from the perpetrator, the criterion of intent is still included in the bullying definition to distinguish it from accidental harm (Goldsmid & Howie, 2014). Recently, efforts have been made to clarify this criterion even further by redefining bullying as goal-directed behaviour instead of merely intentional harming (Volk et al., 2014). It is argued that such a redefinition would further emphasise the proactive nature of bullying, seeing that numerous studies have shown that bullying perpetration correlates more strongly with proactive rather than with reactive aggression (Ang, Huan, & Florell, 2014; Sijtsema, Veenstra, Lindenberg, & Salmivalli, 2009). Nevertheless, studies linking bullying perpetration to both forms of aggression do exist (e.g., Burton, Florell, & Gore, 2013). Despite the consensus regarding the importance of this criterion, there are still studies demonstrating how school learners do not regard intention as a significant defining feature of bullying (e.g., Hellström, Persson, & Hagquist, 2015).

If bullying were defined only in terms of intent to inflict harm, it would be no different from general peer aggression (Cascardi, Brown, Iannarone, & Cardona, 2014). The second criterion is that of repetitiveness. Whereas some studies found that this element is crucial to the definition of bullying (Cascardi et al., 2014; Ybarra, Espelage, & Mitchell, 2014), others dispute its importance (Cuadrado-Gordillo, 2012; Mishna et al., 2006; Volk et al., 2014). The inclusion of the element of repetition served as a means of excluding isolated acts of aggression and increasing the certainty that the behaviour was intended (Olweus, 2013). Furthermore, this definitional component emphasises how the power differential—in favour of the perpetrator—solidifies with each repeated bullying incident (Craig, Pepler, & Blais, 2007). However, no consensus has yet been reached regarding the degree of repetition required to classify an incident as bullying (Sigurdson et al., 2014; Solberg & Olweus, 2003; Wilson, Celedonia, & Kamala, 2013). Even single, more serious acts of harassment with the potential of instilling an everlasting threat or fear of what may happen is considered bullying, which questions the absolute necessity of this criterion (Olweus, 2013; Tattum, 1997). This has led several researchers (e.g., Lee, 2006; Rigby, 2005) to believe that bullying perpetration lies on a continuum, with hurtful but harmless teasing on the one side, and violent (repetitive assaults) on the other side—with repetition being key in determining at which end of the continuum an act should be placed. As the frequency of exposure to bullying events increases,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

so does the degree of harmfulness a victim experiences (Ybarra et al., 2014). However, others have argued that, to comprehend the spectrum of bullying fully, one must consider both the frequency and intensity of the bullying act or experience, as well as the victim's perceptions of harm (Volk et al., 2014).

Most researchers agree on the third criterion, namely that the perpetrator possesses actual or perceived power over the victim (Cascardi et al., 2014; Mishna et al., 2006; Ybarra et al., 2014). According to Olweus (2013), the perception of power imbalance resides in the victims, in terms of perceived difficulty in defending themselves. However, other researchers (e.g., Parada, 2006; Volk et al., 2014) believe that bullies deliberately target individuals whom they perceive as having only a moderate chance of retaliating. Such an asymmetric power relationship may present itself in various forms, with perpetrators demonstrating actual or perceived superiority in terms of physical strength, likeability, popularity, athleticism, intelligence, or theory of mind (Cerezo & Ato, 2010; Felix, Sharkey, Green, Furlong, & Tanigawa, 2011; Green, Felix, Sharkey, Furlong, & Kras, 2013; Sutton et al., 1999). These characteristics enable bullies to occupy a central position in a social peer network, thus enabling them to influence, manipulate, or even dominate their peers (Faris & Felmlee, 2011). Power by demographic factors (e.g., age, gender, sexual orientation, and ethnic group) is another possibility, but this would require further investigation (Hanish et al., 2013). Whatever the source, perpetrators of bullying abuse this imbalance of power for their own benefit to dominate the target, for whom such domination is unwanted and is consequently harmful in some way (Marsh et al., 2011). The importance of this criterion arguably lies in its ability to distinguish bullying from other forms of proactive aggression and harassment (Cascardi et al., 2014; Olweus, 2013; Volk et al., 2014). However, other studies (especially research on school learners' and university students' perceptions of bullying) do not provide strong support for the link between bullying and power imbalance (Goldsmid & Howie, 2014; Varjas et al., 2008). In fact, researchers such as Parada (2006) argue that this criterion of power imbalance possibly has been overemphasised, as it does not appear to make a significant contribution to the definition of bullying that is not already implied by the bullying acts. In other words, the inclusion of this definitional component is circular in nature: Perpetrators bully other learners because they are perceived to be weaker in some form, and the victims are subsequently said to be weaker because they are bullied. Thus, including this element as a pre-requisite for bullying is deemed unnecessary. It is argued further that the existence of bully-victims (i.e., learners who simultaneously bully others and who are bullied

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

themselves) only confirms that power dynamics in relationships may be a fleeting phenomenon dependent on the specific situation rather than on characteristics of the bully or victim (Parada, 2006). Although this fluent nature of power asymmetry is especially evident in temporary bullying situations, it could become more stable over time as social interactions become more established between learners (as in the case of long-term bullying) (Thornberg, 2015).

The fourth and fifth criteria of the definition of bullying are provocation and victim distress (Goldsmid & Howie, 2014). The apparent lack of provocation distinguishes proactive aggression from reactive aggression (Rigby, 2006). As bullying is a form of proactive aggression, it would imply that to identify such behaviour, one should dismiss all aggressive acts that are provoked (Farrington & Ttofi, 2009). However, some studies provide evidence that not all bullying is necessarily unprovoked (Goldsmid & Howie, 2014; Monks & Smith, 2006). Olweus (2013) also states that “most bullying occurs without apparent provocation on the part of the targeted child or youth” (p. 756). This would substantiate the idea that, at least in some learners, bullying might be elicited. However, Parada (2006) again cautions against the use of provocation in the definition of bullying, as the inclusion of this element potentially could create the impression that bullying is justifiable, which ultimately results in blaming victims for the bullies’ actions. Instead, Volk et al. (2014) stress that, to be classified as bullying, behaviour should serve a particular goal-related function, regardless of whether that behaviour was provoked or not. For example, a learner might feel threatened by a (perceived) challenge to his or her social status by another learner lower in the social hierarchy and consequently respond by using bullying to maintain his or her status. This would make it a somewhat provoked form of bullying. However, the same behaviour could also occur in the absence of any challenge from the weaker individual, with the bully perhaps realising another’s rise in social status and therefore engaging in bullying to prevent the learner from becoming a threat (Volk et al., 2014). Overall, it would appear as though most researchers would concur that the definitional component of provocation is not critical to the overall definition of bullying.

The last criterion of victim distress is not overtly stated in most definitions of bullying but rather assumed, as seen from numerous studies linking bullying with physical and psychological consequences for victims (Boyes et al., 2014). The absence of this definitional element may be due to the subjectivity in evaluating distress and to measurement difficulties; as responses to similar levels of victimisation may vary greatly (Goldsmid & Howie, 2014;

Rigby, 1997). In spite of this, several studies support the idea that bullying should (in part) be defined in terms of its effects on the victims (Goldsmid & Howie, 2014; Hellström et al., 2015; Tattum, 1997).

It would appear that the understanding of the concept of bullying varies by age (Monks & Smith, 2006; Ucanok, Smith, & Karasoy, 2011), gender (Frisén, Holmqvist, & Oscarsson, 2008), culture (Smorti, Menesini, & Smith, 2003), the role played in a bullying situation as a perpetrator, victim, or bystander (Cuadrado-Gordillo, 2012), the population group (e.g., students, parents, teachers, or researchers) (O'Brien, 2009; Varjas et al., 2008), and the theoretical orientation of the researcher (Thornberg, 2015). In fact, bullying definitions change with time, purpose, and culture; and no one definition can fully embrace all bullying acts and relationships (Lee, 2006). Even though clarity still needs to be achieved with regard to some definitional criteria, or even the definition of bullying as a whole, these uncertainties should not prevent future research on the subject (Smith, 2004).

3.3.2.2 Cyberbullying. The emergence of cyberbullying adds another dimension to the complex phenomenon of bullying, illustrating just how definitions are evolving. A term made popular by Belsey (2006), cyberbullying can be defined as the deliberate and repeated use of aggressive or hostile acts by using information and communication technologies. Another well-cited definition, derived from Olweus' definition of bullying, applies the three core criteria of traditional bullying (intent to harm, repetition, and power imbalance) to the cyber domain; stating that cyberbullying is "an aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him- or herself" (Smith et al., 2008, p. 376). As in the case of traditional bullying, there is much debate about which of these elements should be included, thus leading to an array of definitions of cyberbullying (Langos, 2012; Wingate, Minney, & Guadagno, 2013). For example, the potential for anonymity in cyberspace makes it difficult to infer malicious intent in a cyber context, as it eliminates the ability to see another's body language or facial expressions. This physical detachment from bullies could result in victims misinterpreting harmless messages as threatening attacks, or bullies having a diminished sense of awareness regarding the consequences of their actions (Kokkinos, Antoniadou, Asdre, & Voulgaridou, 2016; Menesini & Nocentini, 2009; Raskauskas & Stoltz, 2007). Regardless, most researchers agree that cyberbullying involves intent to harm (Langos, 2012; Nocentini et al., 2010). Some authors argue that instead of merely taking a bully's intention into account, the effects on victims (i.e., victim distress) as well as their perceptions of an act

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

as hurtful also need to be considered, as these could be more relevant in determining the seriousness of the behaviour (Nocentini et al., 2010; Vandebosch & Van Cleemput, 2008). In fact, a study conducted by Dredge, Gleeson, and De la Piedad Garcia (2014) illustrated that the most referenced criterion in defining cyberbullying was the effect that the act had on the victim. Such studies suggest that, instead of focusing on the core criteria used for traditional bullying (i.e., intent to harm, repetition, and power imbalance), other criteria (e.g., victim distress) may be more relevant in classifying an act as cyberbullying.

According to Langos (2012), the element of repetition depends on the nature of the cyberbullying act. In direct cyberbullying, in which the bully directly communicates with the victim, the aggressive act needs to occur continuously to classify the act as bullying. In contrast, indirect cyberbullying involves a perpetrator posting aggressive comments or visuals (intended for the victim) on a public cyber forum (Langos, 2012). In such a case, the element of repetition is established by the ability of a single aggressive act to be viewed multiple times by an infinite audience (Langos, 2012; Nocentini et al., 2010). However, Dooley, Pyżalski, and Cross (2009) highlight that the same act of aggression can be classified as both direct and indirect cyberbullying, due to the potential anonymity that cyberspace provides. For example, a bully can attack a victim directly (direct cyberbullying), but if his identity is hidden, it could be regarded as an act of indirect cyberbullying.

In addition, it is not yet agreed on how to conceptualise and assess power imbalance in a cyber context (Thomas, Connor, & Scott, 2015). Owing to the high correlation between traditional bullying and cyberbullying (i.e., most traditional bullies and victims retain their roles in the cyber context) (Modecki, Minchin, Harbaugh, Guerra, & Runions, 2014), it is suggested that similar features exist in both contexts that would provide the bully with actual or perceived power (e.g., perceived popularity) (Pieschl, Porsch, Kahl, & Klockenbusch, 2013). At the same time, the potential for an attack to be anonymous and public in nature suggests that cyberbullying is a distinct phenomenon (Griezel et al., 2012; Pieschl et al., 2013), whereby a power imbalance could be achieved in ways unique to technological devices (e.g., varying degrees of technological skill between the bully and victim, or difficulty in avoiding attacks) (Dooley et al., 2009; Vandebosch & Van Cleemput, 2008). Perhaps it is the anonymity itself that cyberspace provides (i.e., not knowing the person behind the aggressive acts) that makes victims feel powerless (Naruskov, Luik, Nocentini, & Menesini, 2012). In fact, Dooley et al. (2009) propose that an imbalance of power may rather be based on a victim's lack of power instead of a bully's possession of power. In contrast, it has also been

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

advocated that this anonymity in cyberspace might actually reduce the need for perpetrators to be more powerful than their victims are, thus querying the relative importance of power as a definitional criterion in the cyber context (Nocentini et al., 2010). Such a claim is accentuated further by studies in which participants do not regard the component of power imbalance as an important feature when defining cyberbullying (e.g., Dredge et al., 2014).

Even though anonymity is considered unique to a cyber setting, its exact role is still debatable: Whereas some researchers argue that it only augments the severity of a cyberbullying act (Nocentini et al., 2010; Vandebosch & Van Cleemput, 2008), others consider it as a significant component in the definition of cyberbullying (Naruskov et al., 2012; Thomas et al., 2015). In fact, a study conducted by Barlett, Gentile, and Chew (2014) further emphasised anonymity as a key characteristic of cyberbullying by finding a significant positive relationship between perceived anonymity and cyberbullying. Thus, the more anonymous an aggressor feels online, the higher the chances to cyberbully others. However, other studies yet again found that the component of anonymity merely described the severity and nature of a cyberbully attack and was not a requisite to define an act as cyberbullying (Nocentini et al., 2010). To complicate matters even further, some studies propose that its effect can be fully understood only in the light of other criteria such as intentionality (Menesini et al., 2012). Thus, the criterion of anonymity and its relationship with power remain unclear (Dooley et al., 2009). The fact that the identity of the perpetrator was known to the victim in most cases (Carter & Wilson, 2015; Lapidot-Lefler & Dolev-Cohen, 2015) may suggest that cyberspace provides potential perpetrators only with perceived, rather than actual anonymity, which further questions the necessity of this criterion.

Another new cyber-specific criterion other than anonymity is publicity—a component describing any act in which a large audience is involved (e.g., text messages sent to a large audience or interactions occurring in a public forum) (Nocentini et al., 2010). Similar to anonymity, however, the criterion of publicity is not deemed necessary to label an act as cyberbullying (Menesini et al., 2012; Nocentini et al., 2010), but instead expresses the seriousness of the attack (Nocentini et al., 2010). In fact, previous research has demonstrated that a cyberbullying act can have a more devastating effect on a victim if it possesses the potential to reach a large and public audience (Menesini, Nocentini, & Calussi, 2011; Slonje & Smith, 2008).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Not much research exists regarding the specific role of provocation in the definition of cyberbullying. This might be because cyberbullying acts could be both reactive and proactive in nature (Wingate et al., 2013), thereby eliminating the need to stress the role of provocation. Learners might be provoked by differences in a victim's appearance, behaviour, or general characteristics (online or offline), thus resulting in acts of cyberbullying (Robson & Witenberg, 2013). Such cyberbullying perpetration is facilitated by the perceived anonymity that cyberspace provides. Owing to the lack of physical or social cues, communication in an electronic environment could be seen as ambiguous, with learners possibly attributing hostile intent to neutral messages (Wingate et al., 2013). Such hostile intent attribution—a feature of reactive aggression—could thus trigger some learners to respond with aggression. Further support for the reactive nature of cyberbullying is provided by studies finding that experiences of bullying online subsequently might provoke a learner to engage in cyberbullying perpetration (Kowalski et al., 2014). Alternatively, cyberbullying could take the form of proactive aggression, in which learners might create harmful websites about another or create a fake online identity to obtain personal and potentially damaging information from a victim (Wingate et al., 2013).

Thus, it would currently appear that the three criteria originally put forth by Olweus (i.e., intent to harm, repetition, and power imbalance) are also relevant to cyberbullying, even though they might take on different meanings in these two different contexts (Pieschl et al., 2013; Thomas et al., 2015). However, simply applying the three key definitional criteria of traditional bullying to the cyber domain implies that these two forms of bullying differ only with regard to the medium in which they occur. Because there is still a lack of agreement regarding the degree of overlap between traditional bullying and cyberbullying (Antoniadou & Kokkinos, 2015), it could mean that additional criteria (e.g., anonymity, publicity, and victim distress) are needed to describe cyberbullying better. However, these criteria would require further research regarding their exact roles (Thomas et al., 2015). Uncertainties regarding all of these matters have caused several researchers (e.g., Dredge et al., 2014) to call upon revising the current understanding of what constitutes cyberbullying.

In an attempt to conceptualise cyberbullying relative to traditional bullying further, Barlett and Coyne (2014) set out to determine which gender is more involved in cyberbullying. According to these researchers, if more males engaged in cyberbullying (as they do in traditional bullying perpetration), then cyberbullying could be regarded as a specific form of traditional bullying. However, if more females relative to males were

involved, or if no gender differences were found to exist, then cyberbullying could be understood better as a special form of indirect or relational bullying that occurs online. It was found that age moderated the relationship between gender and involvement in cyberbullying; with more females reporting cyberbullying during early adolescence. Conversely, more males reported cyberbullying during late adolescence. Thus, it appears that cyberbullying is best explained as a form of indirect bullying—at least during early adolescence (Barlett & Coyne, 2014).

3.3.3 Types of bullying. Most researchers agree that bullying is a heterogeneous phenomenon with the various behaviours being classified as either direct (overt) or indirect (covert), depending on the methods used to bully the victim (Mynard & Joseph, 2000; Rivers & Smith, 1994). Whereas direct bullying refers to confrontational, open attacks on the victim (which can either be physical or verbal in nature), indirect bullying includes all non-confrontational acts such as those employed in social-relational bullying, and may occur through a third party. In fact, this broad dichotomy of direct and indirect bullying can be subdivided further into different subtypes, including physical- (e.g., hitting, kicking, pushing, tripping, and damaging another's belongings), verbal (e.g., teasing, threatening, rude remarks, and name calling), social-relational (e.g., social exclusion, ignoring, and rumour spreading), and cyberbullying (Farrell et al., 2014; Mynard & Joseph, 2000; Olweus, 2013). The first three forms of bullying—physical, verbal, and social-relational—have been coined traditional or face-to-face bullying (Robson & Witenberg, 2013; Shetgiri, 2013). These subtypes have been shown to vary from one another in terms of personality traits (Farrell et al., 2014), social cognitive abilities (Smith, Polenik, Nakasita, & Jones, 2012), gender (Rivers & Smith, 1994; Wang, Iannotti, & Nansel, 2009), and age (Farrell et al., 2014; Williford, Brisson, Bender, Jenson, & Forrest-Bank, 2011).

Considering all these forms of bullying, it has been found that verbal bullying, including teasing, is the most prevalent form of bullying in primary and high schools (Coertze & Bezuidenhout, 2013; Felix et al., 2011; Luxenberg et al., 2015; Thomas et al., 2016). Owing to its reported high prevalence, it becomes imperative to distinguish between playful and malignant teasing (i.e., bullying). According to Roberts and Morotti (2000), the manner, intensity, and incidence in which such teasing is delivered, as well as the victim's perception regarding the teasing all contribute to distinguishing normal teasing from bullying. Thus, teasing can be classified as a form of bullying only when it is of a highly intense, degrading nature, occurs regularly, is perceived by the victim as damaging, and continues despite

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

distress or opposition from the victim (Olweus, 1999; Roberts & Morotti, 2000). It has also been argued that teasing requires a balance of play (humour) and challenge (aggression), whereas bullying has been said to occur when the latter outweighs or is perceived to outweigh the former (Mills & Carwile, 2009). Thus, even though playful teasing and bullying can occur in both symmetrical and asymmetrical power relationships, the difference in the aim of the tease (e.g., maintaining social bonds versus terminating bonds or asserting status) distinguishes between these two acts (Parada, 2006). Figure 4 summarises the different subtypes or forms of traditional bullying.

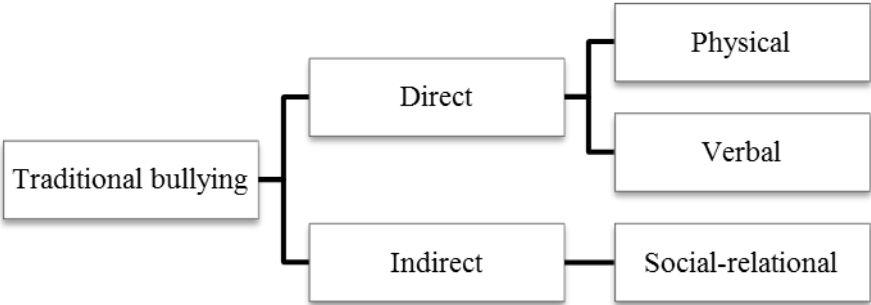


Figure 4. The different forms of traditional bullying.

It is perhaps more difficult to classify cyberbullying into different types, as it can take on so many forms and occur through many different media. For example, cyberbullying can be either direct or indirect: Whereas direct cyberbullying occurs in the private domain and involves the bully directly targeting only the victim via e-mails or text messaging, indirect cyberbullying entails posting negative messages on public areas of cyberspace (e.g., Facebook), thereby allowing individuals other than the victim to have access to that information (Langos, 2012). Other authors divide types of cyberbullying according to the specific media used. For example, Griezel et al. (2012) distinguish between two forms of cyberbully acts, namely textual and visual cyberbullying. Another method to classify cyberbullying acts—somewhat independent of the media used—is by considering the type of action or content involved. For example, Willard (2007) identified several forms of cyberbullying based on the specific behaviour involved, namely flaming, online harassment, denigration, impersonation, trickery, outing, exclusion, and cyberstalking. Such different typologies reflect just how quickly communication through electronic devices is changing. For example, it would no longer be deemed appropriate for researchers (e.g., Ortega, Elipe, Mora-Merchán, Calmaestra, & Vega, 2009) to classify cyberbullying into the two main

categories of Internet and mobile phone bullying, as many smartphones currently have access to the Internet. In contrast, some researchers found the construct of cyberbullying to be unidimensional in that different bullying acts formed a single continuum of severity (i.e., items ranged from least severe to most severe, regardless of medium or content) (Menesini et al., 2011). As summarised by Slonje, Smith, and Frisén, (2013), cyberbullying can be examined in terms of the medium used (phone versus Internet), more specific methods of using these devices (e.g., text messaging, e-mails, and social media platforms), and the type of behaviour (e.g., exclusion and flaming). Figure 5 provides a summary of the different ways in which cyberbullying can be classified.

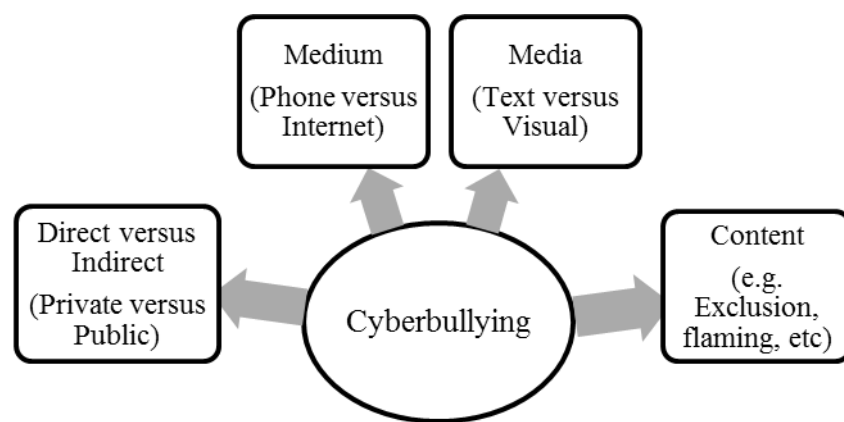


Figure 5. Summary of the different classifications methods used to categorise cyberbullying.

3.3.4 Overlap between traditional bullying and cyberbullying. Apart from various avid debates on how to define bullying and conceptualise its different types, it would seem that there is much dispute over the degree of overlap between traditional bullying and cyberbullying (Antoniadou & Kokkinos, 2015; Kubiszewski, Fontaine, Potard, & Auzoult, 2015). According to Antoniadou and Kokkinos (2015), there are three main viewpoints regarding this dispute: Firstly, some researchers would describe cyberbullying as an extension of traditional bullying using new technological devices (Modecki et al., 2014; Olweus, 2013; Tarabulus, Heiman, & Olenik-Shemesh, 2015; Zych et al., 2015). Advocating for the idea that traditional bullying and cyberbullying represent a single phenomenon expressed in two different contexts include studies showing how learners take on the same bullying roles in online bullying as they do in offline bullying (Raskauskas & Stoltz, 2007; Wang, Iannotti, & Luk, 2012) and that both types of bullying share similar predictors and developmental outcomes (Kowalski & Limber, 2013; Navarro, Yubero, & Larrañaga, 2015). In addition, some studies (e.g., Bradshaw, Waasdorp, & Johnson, 2015; Wang et al., 2012) showed that

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

only learners who engaged in all forms of traditional bullying had the highest probability of engaging in cyberbullying. This possibly illustrates how learners attempt to bully their victims in all possible ways, perhaps beginning with one form of traditional bullying perpetration, while later employing additional methods of bullying, including the extension of their efforts to an electronic environment.

A second position holds that these two forms of bullying are distinct, providing other learners with opportunities to become involved in cyberbullying (Kubiszewski et al., 2015; Schultze-Krumbholz et al., 2015; Tanrikulu & Campbell, 2015). For example, it has been shown that learners involved in cyberbullying are not always the same learners involved in traditional bullying (Hemphill, Tollit, Kotevski, & Heerde, 2015). This would contradict the idea that cyberbullying is simply a variant of traditional bullying. Likewise, studies proving that traditional bullying and cyberbullying have different predictors and/or effects on learners (Antoniadou et al., 2016; Hemphill et al., 2015; Kubiszewski et al., 2015; Merrill & Hanson, 2016) and that involvement in cyberbullying does not necessarily predict involvement in traditional bullying (Del Rey, Elipe, & Ortega-Ruiz, 2012) all support the proposition that these are two distinct phenomena. Finally, the conceptual differences between these forms of bullying, including the anonymous nature of cyberbullying, increased accessibility to the victims, and a potentially infinite audience witnessing the cyber aggression also aid in distinguishing these two forms of bullying as distinct (Kowalski et al., 2014).

A third group of researchers hold a position that could be considered a synthesis of the first two perspectives; namely that traditional bullying and cyberbullying are only partially related phenomena, largely due to the challenges inherent in providing these different forms of bullying with a similar definition (Antoniadou & Kokkinos, 2015). As illustrated by Vandebosch and Van Cleemput (2008), cyberbullying definitions may include only some, or all of the definitional components of traditional bullying (i.e., intent to harm, repetition, and power imbalance), together with a description of the electronic medium the bully is using. Thus, cyberbullying may be similar to traditional bullying to some extent, but only with regard to specific aspects. Therefore, it appears that, in general, there is still no consensus regarding the correlation between traditional bullying and cyberbullying, thus warranting further research (Antoniadou & Kokkinos, 2015).

3.4 Risk Factors

It is imperative to identify factors that contribute to the onset or maintenance of bullying perpetration and victimisation, to comprehend the emergence of these behaviours better and to improve anti-bullying prevention and intervention efforts. However, owing to the cross-sectional nature of most studies reported in literature on bullying, it is often not possible to determine whether a characteristic contributed to the emergence of bullying, or whether the bullying led to that characteristic. Thus, most studies identify correlates of bullying, instead of risk factors (Cicchetti, 2006). Regardless, many researchers using a cross-sectional research design still label their constructs as risk factors for bullying, as it is argued that to confuse the temporal sequence of certain associations is unlikely (e.g., it is improbable that victimisation of a child will lead to domestic abuse in the home) (Cluver, Bowes, & Gardner, 2010).

Conventionally, learners involved in bullying are placed in one of four categories, namely “non-involved,” “bullies,” “victims” and “bully-victims”, based on a pre-determined cut-off score on bullying measures (Nylund, Bellmore, Nishina, & Graham, 2007). Many researchers (e.g., Finger et al., 2005) oppose this practice of dichotomising continuous variables. How to measure the construct of bullying optimally is discussed at the end of this chapter. Even though it is generally agreed that it is inappropriate to dichotomise continuous variables in psychological research, it remains a pervasive practice in the literature on bullying (Marsh et al., 2011). Therefore, to reflect the findings of mainstream literature, the current discussion reviews the risk factors associated with each category of bullying.

As opposed to each bullying group possessing its own unique correlates and risk factors, evidence exists that suggests that certain characteristics are shared by all bullying categories across traditional and cyber contexts, thus reinforcing the idea of multifinality (Cook et al., 2010; Kowalski & Limber, 2013). There are various reasons why it remains imperative to study whether any commonalities exist among the precursors of different types of bullying, including its relevance in theory building, practice, and prevention (Low & Espelage, 2013). For example, several researchers (e.g., Cook et al., 2010; Zych et al., 2015) found that poor social problem solving is a common trait across all bullying groups. By interacting with different individual and contextual factors, this risk factor may place a child either in the role of a perpetrator, target, or bully-victim. Similarly, Shakoor et al. (2012) found that learners involved in bullying (regardless of their role) possessed poorer theory of mind. Furthermore, it was discovered that social and conduct problems act as risk factors for

both bullying perpetration and victimisation (Kljakovic & Hunt, 2016), and that both perpetrators and targets of traditional bullying shared certain personality traits (Mitsopoulou & Giovazolias, 2015). Additionally, findings from studies also suggest that poor parent-child attachment relationships may place learners at risk for involvement in bullying in any role across traditional and cyber contexts (Bayraktar et al., 2015; Walden & Beran, 2010; You et al., 2015)—a topic that is discussed further in Chapter 5. In other words, no single factor will cause a child to engage in either bullying perpetration or victimisation. Rather, it is the result of the interaction of multiple factors at multiple levels of analyses—an idea advocated by perspectives such as developmental psychopathology (Coertze & Bezuidenhout, 2013). Furthermore, individual-level risk factors may interact with demographic variables (e.g., age, gender, and ethnicity) to give rise to bullying (Álvarez-García et al., 2015), another topic that is discussed later in this chapter. In the following section, various risk factors pertaining to each of the different role players involved in bullying are discussed.

3.4.1 Individual level

3.4.1.1 Bully (perpetrator). Contrary to previous beliefs, perpetrators of bullying are not a homogenous group (Peeters, Cillessen, & Scholte, 2010). This can be illustrated by the current debate that investigates the social-cognitive abilities of perpetrators of bullying: On the one hand, it is said that perpetrators may display certain deficits or biases in their social information processing, thereby accounting for their chronic patterns of aggressive behaviour (Crick & Dodge, 1999; Shakoor et al., 2012; Ziv et al., 2013). For instance, perpetrators may hold a favourable view of aggression as a way to achieve their goals (Álvarez-García et al., 2015; Cuadrado-Gordillo, 2012; Lucia, 2016), have negative beliefs and attitudes about others (Cook et al., 2010), and display lower levels of cognitive empathy or theory of mind (Mitsopoulou & Giovazolias, 2015; Williford et al., 2016).

On the other side of the debate, however, researchers argue for the fact that perpetrators possess superior social cognitive skills, specifically a superior theory of mind, which they use to manipulate and bully other learners (Gini, 2006; Sutton et al., 1999). The fact that many perpetrators show little empathy for their targets (Álvarez-García et al., 2015; Jolliffe & Farrington, 2011) might reinforce their ability to exploit their superior social cognition to gain dominance and popularity. However, a distinction should be made between cognitive and affective empathy. A meta-analysis conducted by Mitsopoulou and Giovazolias (2015) confirmed that the size of the negative correlation between cognitive empathy and bullying

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

perpetration was fairly small, suggesting that even though perpetrators might possess some degree of cognitive empathy, they are lacking in the affective component. The interaction of social cognition with other variables might well determine its effect on bullying perpetration. In fact, Cassidy and Taylor (2005), as well as Gasser and Keller (2009), suggest that the outcome of this debate may depend on whether the perpetrator is also victimised simultaneously (i.e., bully-victim), with a perpetrator-only learner displaying superior social problem-solving skills and the bully-victim exhibiting deficits in this area. Alternatively, some studies support the notion that while perpetrators who engage in direct bullying perpetration demonstrate deficits in their social cognitive skills, perpetrators who bully indirectly do not (Smith, Polenik, et al., 2012).

Although the identification of risk factors associated with victimisation is the most researched topic in literature on bullying (García & Margallo, 2014), comparatively fewer studies have attempted to identify factors that place learners at risk for becoming a perpetrator of bullying (Kljakovic & Hunt, 2016). In addition to social cognition (including theory of mind and empathy), risk factors thus far identified for bullying perpetration include increased physical strength (Cerezo & Ato, 2010; Olweus, 1994), low tolerance level for dissimilarity with other learners (Lee, 2010), impulsivity, problems with emotional regulation and sensation seeking (Álvarez-García et al., 2015; Bettencourt, Farrell, Liu, & Sullivan, 2013; Smith, Polenik et al., 2012), as well as high levels of externalising behaviour (Farmer et al., 2015; Zych et al., 2015). In terms of self-esteem, an intricate relationship appears to exist between this factor and bullying perpetration: While some studies report a negative relationship between these two variables, others found that high self-esteem correlated with increased bullying perpetration (Álvarez-García et al., 2015; Erhabor, 2013; Guerra, Williams, & Sadek, 2011).

Although cyberbullying overlaps with traditional bullying to some extent, it still has its own specific characteristics. This suggests that even though many of the risk factors are the same for both traditional bullying and cyberbullying perpetration, factors unique to cyberbullying also exist (Antoniadou et al., 2016). Factors that may place learners at risk for engaging in either online or offline bullying perpetration include moral disengagement and low levels of empathy (Casas, Del Rey, & Ortega-Ruiz, 2013; Robson & Witenberg, 2013; Zych et al., 2015), high levels of (proactive) aggression (Sijtsema et al., 2009; You & Lim, 2016), poor self-control (Lucia, 2016; You & Lim, 2016), and involvement in previous traditional bullying perpetration (Mishna, Khoury-Kassabri, Gadalla, & Daciuk, 2012;

Pontzer, 2010; You & Lim, 2016). Unique risk factors for cyberbullying perpetration include risky and prolonged Internet use (Sittichai & Smith, 2015; You & Lim, 2016), Internet addiction (Casas et al., 2013), grandiose-manipulative and psychopathic traits (Antoniadou et al., 2016), and previous online victimisation (Antoniadou et al., 2016; Walrave & Heirman, 2011).

3.4.1.2 Victim (target). Olweus (1994) postulated that there are two types of victims: Firstly, passive or submissive victims are characterised by an anxious reaction pattern and will not retaliate if they are bullied. Secondly, bully-victims refer to learners who are perpetrators and targets of bullying simultaneously.

In general, the “typical victim or target” (passive or submissive) is physically weaker compared to other learners (Guerra et al., 2011; Olweus, 1994), engages in submissive and withdrawn behaviour (Tom, Schwartz, Chang, Farver, & Xu, 2010), has a lower self-esteem (Cassidy, 2009; Olweus, 1994), and has higher levels of internalising symptoms (Farmer et al., 2015). Additional risk factors for victimisation include excelling in academics (Lehman, 2014) and deviances in physical appearance (Coertze & Bezuidenhout, 2013; Gower, McMorris, & Eisenberg, 2015). Victims also tend to hold negative views and attitudes toward themselves (Meland et al., 2010; Zych et al., 2015) and may display deficits in social skills (De Wet, 2005b; Zych et al., 2015).

Many of the same risk factors found in traditional bullying victimisation are also indicated in cyberbullying victimisation, possibly due to the significant overlap between these two forms of victimisation (Merrill & Hanson, 2016). For example, internalising symptoms such as depression and anxiety can make victims appear more vulnerable, thus easy targets for perpetrators in both the traditional and cyber domains (Hong & Espelage, 2012; Yang et al., 2013; Zych et al., 2015). In fact, Cross et al. (2015) found that learners with peer or emotional problems were more likely to be victimised in both contexts, rather than in one domain only. Navarro et al. (2015) demonstrated that in both traditional and cyberbullying victimisation, learners reported less social companionship and feeling less close to friends; whereas Hemphill et al. (2015) found that previous victimisation by means of traditional bullying was a common predictor for subsequent traditional and cyberbullying victimisation.

Despite the many overlapping risk factors, differences between the different groups of victims can be found. For instance, whereas significant relationships were found between

traditional victimisation and lack of social self-efficacy, such correlations were absent for cyberbullying victimisation (Navarro et al., 2015). As opposed to traditional victims, cyber victims were also found to experience peer relations that were more problematic (Antoniadou et al., 2016). Frequent Internet use (Kowalski et al., 2014; Rice et al., 2015) and risky online behaviour (Casas et al., 2013; Kowalski et al., 2014) are variables often linked to increased cyberbullying victimisation. However, some researchers found that online behaviour predicts not only online victimisation. For example, Merrill and Hanson (2016) found that spending three or more hours per day playing video games increased the risk for being victimised traditionally and in the cyber context. Additionally, Yang et al. (2013) found that while previous traditional bullying perpetration was associated with later cyberbullying victimisation, it was not associated with later traditional bullying victimisation. Altogether, these findings show that although there is a definite relationship between traditional and cyberbullying victimisation, a perfect overlap between these constructs does not exist.

3.4.1.3 Bully-victim. In contrast, bully-victims (also known as provocative or aggressive victims) are characterised by both anxious and aggressive reaction patterns (Olweus, 1994). This group of learners tend to respond aggressively when they are being bullied—acting out of anger or revenge. Alternatively, they may be victims of previous bullying experiences that gradually transitioned to bullying perpetration over time (Haltigan & Vaillancourt, 2014; Pontzer, 2010). Therefore, in contrast to perpetrators who bully to gain status, bully-victims react aggressively due to their victimisation experiences, or perhaps to become a member of the more socially dominant group (Haltigan & Vaillancourt, 2014; Powell & Ladd, 2010). They may also behave in ways (e.g., hyperactively) that may irritate or provoke other learners, thus eliciting negative responses (such as bullying) from peers (Olweus, 1994). Although it is generally found that bully-victims represent the smallest group of bullying participants in the traditional context (Sigurdson et al., 2014; Wu et al., 2015), some studies have shown that this role is most common when compared to other bullying roles in the cyber domain (Antoniadou et al., 2016; Mishna et al., 2012). Researchers such as Parada (2006) caution against the use of this bullying category, as it could imply that it is the behaviour of targets that is inevitably contributing to them being bullied. In this way, bullying perpetration will be justified under certain conditions, ultimately shifting the blame for such behaviour from the perpetrator onto the target. Given its ongoing use, however, the relevant literature on this bullying category will be outlined briefly.

The bully-victim group possesses the greatest number of risk factors, characterised by many of the same traits found in perpetrators and targets of bullying (Cook et al., 2010; Kowalski & Limber, 2013; Zych et al., 2015). These include weight status (Kim, Boyce, Koh, & Leventhal, 2009), poor social competence and problem-solving skills (Cassidy & Taylor, 2005; Cook et al., 2010), high academic achievement (Mlisa, Ward, Flisher, & Lombard, 2008), being disliked by peers (Veenstra et al., 2005), moral disengagement (Tanrikulu & Campbell, 2015), poor emotional understanding and regulation (Bettencourt et al., 2013; Habashy Hussein, 2013), aggression-impulsivity (Jansen, Veenstra, Ormel, Verhulst, & Reijneveld, 2011; Pontzer, 2010), engaging in previous acts of bullying perpetration (Pontzer, 2010), and favouring aggressive responses to threats (O'Brennan, Bradshaw, & Sawyer, 2009). Several researchers (e.g., Kim et al., 2009) also found that the bully-victim group had the highest risk for persistent involvement in bullying. Likewise, Kokkinos, Antoniadou, and Markos (2014) found that cyber bully-victims present with higher scores on many of the same traits found in learners who only engage in cyberbullying as a perpetrator or as a victim. For example, cyber bully-victims scored higher on measures of Internet usage, impulsivity, boredom susceptibility, grandiose or manipulative traits, hostility, and online disinhibition, which is a phenomenon usually resulting from the anonymity of cyberspace in which adolescents say and do things that they usually would not do in face-to-face interactions (Suler, 2004). The presence of such a diverse range of behavioural and psychological traits once again substantiates the claim that bully-victims, whether in the traditional or electronic contexts, are the most problematic group.

3.4.2 Contextual level. Compared to individual characteristics, less research has been conducted on the influence of contextual factors on bullying. At a family level, studies have indicated that exposure to domestic or family violence (Liu & Graves, 2011), sibling bullying (García & Margallo, 2014), and parenting practices and behaviour (Kokkinos, 2013; Li et al., 2015) are all linked to increased involvement in bullying perpetration and/or victimisation. The role of parenting in bullying in particular is discussed in more detail in Chapter 4. With regard to the peer context, affiliation with other perpetrators or victims of bullying (Farmer et al., 2015; Zych et al., 2015) and concerns over peer status and rejection by peers (Cook et al., 2010; Guerra et al., 2011; Sapouna et al., 2012) are all related to increased levels of bullying perpetration and/or victimisation.

Azeredo, Rinaldi, De Moraes, Levy, and Menezes (2015) recently conducted a systematic review to investigate the contextual factors (at a broader level) relevant to

bullying. These authors found the following factors to be associated with increased bullying: Classrooms, schools, and cities characterised by inequalities in income, schools without anti-bullying programmes, and high levels of city violence. Factors such as class and school size yielded inconsistent results. Additional contextual factors found to be associated with increased bullying include poor teacher support, permissive classroom attitudes towards bullying, bystander behaviour, negative school climate, feeling threatened at school, negative factors of the community, positive societal opinions regarding bullying and aggression, and excessive exposure to the media (Bradshaw et al., 2015; Cook et al., 2010; Gower et al., 2015; Guerra et al., 2011; Liu & Graves, 2011; Saarento et al., 2015; Scholte, Sentse, & Granic, 2010).

Even fewer studies have been conducted regarding the role of contextual variables in cyberbullying. Those that have been conducted report similar findings to that of traditional bullying; in that factors such as parenting practices and behaviour (Kowalski et al., 2014; Kokkinos et al., 2016), classroom attitudes endorsing bullying (Elledge et al., 2013), as well as feeling threatened at school (Gower et al., 2015) are all related to increased levels of cyberbullying perpetration and/or victimisation.

Contextual-level variables can be considered as exerting a less significant influence on bullying, as evidenced by the fact that Azeredo et al. (2015) found that contextual-level factors explained a significantly smaller proportion of the variance in bullying compared to individual-level factors. Nevertheless, it remains important to examine variables at different levels, as contextual-level factors may modify the relationships between individual-level factors and bullying outcomes. Additionally, the study of multiple variables, including those at a contextual level, is in line with a developmental psychopathology perspective on bullying.

3.4.3 Involvement in specific types of bullying. In contrast to the abundance of research on the factors associated with bullying, less research exists regarding how risk factors contribute to specific types of traditional bullying perpetration and victimisation (i.e., physical, verbal, and social-relational bullying) (Thomas et al., 2016). Even though many perpetrators and victims are involved in multiple types of bullying simultaneously (Barboza, 2015; Scheithauer, Hayer, Petermann, & Jugert, 2006), different forms of bullying can have similar risk factors that are not the result of the common influence of learners who experience all forms of perpetration or victimisation (Volk et al., 2006). For example, factors such as

poor scholastic competence, poor behavioural control, substance use, witness to domestic violence, and being a victim of physical and sexual abuse correlated with both direct and indirect forms of bullying perpetration or victimisation (Espelage, Low, & De la Rue, 2012; Smith, Polenik, et al., 2012; Vieno, Gini, & Santinello, 2011). Such findings confirm that the same psychosocial construct can have similar associations with different forms of bullying perpetration or victimisation (i.e., multifinality). Although similar risk patterns may exist, additional (unique) factors can still place learners at risk for employing or experiencing a particular form of bullying. Identifying and understanding such risk factors would aid in tailoring global anti-bullying initiatives for a particular form of bullying (Smith, Polenik, et al., 2012). Although demographic factors such as developmental period, gender, and ethnicity also appear to relate strongly to the type of bullying perpetration or victimisation involvement, these factors are discussed in later sections.

3.4.3.1 Direct bullying. Direct bullying perpetration (i.e., physical and verbal bullying) is associated more frequently with hyperactivity, poor self-regulation and social skills, conduct problems, and aggression (Bradshaw et al., 2015; Lee, 2010; Marini, Dane, Bosacki, & Youth Lifestyle Choices – Community University Research Alliance, 2006; Smith, Polenik, et al., 2012; Yen et al., 2013). In fact, Yen et al. (2013) demonstrated how perpetrators of physical bullying scored lower in harm avoidance as compared to perpetrators of verbal and social-relational bullying. This would imply that perpetrators involved in physical bullying do not try very hard to obey rules or authority figures, which possibly indicates impulsivity and a disregard for social rules and disciplinary actions that in turn causes them to overlook the consequences of conducting a physical bullying act. Preadolescence is a developmental period in which most learners highly value peer acceptability and popularity (Huitsing et al., 2014). Thus, the fact that perpetrators of physical bullying were found to have lower levels of social anxiety might indicate that they were less concerned about social approval or disapproval, enabling them to apply direct means of bullying onto others with ease (Yen et al., 2013). In an attempt to study the personality correlates of different types of bullying perpetration, Farrell et al. (2014) found that physical bullying was related to lower levels of agreeableness and conscientiousness. Such personality traits suggest that learners who employ physical means of bullying are angrier or more irritable, impulsive, careless, and disorderly. The overt nature of this form of bullying reflects these learner characteristics, as low levels of conscientiousness would result in a higher probability that the perpetrator would be caught. With regard to verbal bullying perpetration,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

significant associations were found for agreeableness and honesty-humility (Farrell et al., 2014). In contrast to physical bullying, verbal forms of bullying were not related to conscientiousness. Collectively, these results may imply that perpetrators of verbal bullying regard such behaviour as less risky compared to physical bullying, and may use their superior verbal skills to manipulate others. However, the direct form of verbal bullying still reflects their difficulty in regulating their anger.

Physical bullying victimisation differed from other forms in terms of harm avoidance (Yen et al., 2013). As learners often regard direct means of bullying as having the most serious consequences for victims (Maunder, Harrop, & Tattersall, 2010), it is possible that learners who have been victimised in this way have developed certain behaviour of harm avoidance to avoid being bullied again in the future (Yen et al., 2013). However, these types of avoidance behaviour may render learners as “different” or “odd” and instead increase the likelihood of future victimisation. In addition, these victims have also been shown to display higher levels of anger, which suggests a link between externalising symptoms and being bullied physically (Boel-Studt & Renner, 2013). Results from a study conducted by Tom et al. (2010) confirm the link between externalising behaviour and physical bullying victimisation. These researchers found that girls displaying overt forms of aggression (gender non-normative behaviour) were more likely to be bullied both physically and relationally. In contrast, girls who displayed only relational aggression (gender normative behaviour) had a lower risk of being victimised physically. Furthermore, no significant association was found between boys’ use of either form of aggression and direct victimisation. These findings also suggest that gender norms in a certain culture or society (i.e., behaviour that is considered as acceptable for a specific gender) might play a role in determining whether a learner would be victimised physically (Tom et al., 2010). As peers may perceive girls who do not conform to traditional gender norms (i.e., girls who are overtly aggressive) as possessing more male characteristics, it is plausible that these girls would also be bullied as if they were boys, having to endure more physical bullying victimisation.

3.4.3.2 Indirect bullying. In contrast to direct bullying, perpetrators of indirect bullying (i.e., social-relational) were found to have intact social skills and less conduct problems, but more symptoms of anxiety (Bradshaw et al., 2015; Lee, 2010; Smith, Polenik, et al., 2012; Yen et al., 2013). A study conducted by Yen et al. (2013) found that in comparison to perpetrators of physical bullying, those involved in verbal and relational bullying perpetration suffered from higher levels of physical and social anxiety symptoms.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The authors explained these findings by referring to the stressful nature of conducting a covert form of aggression, in that attempting to bully others without the bullying act being revealed might increase physical anxiety symptoms. Alternatively, the presence of physical symptoms might limit the capacity of a learner to bully others physically, thus having to resort to verbal or relational acts to bully other learners successfully (Yen et al., 2013). With regard to personality characteristics, it was found that social-relational bullying perpetration was predicted solely by the honesty-humility trait and did not correlate with agreeableness or conscientiousness at all (as in the case of direct forms of bullying) (Farrell et al., 2014). Such findings reflect the exploitative and manipulative nature of learners who primarily engage in such forms of bullying and further highlight that such learners tend to use their advanced social knowledge to exclude others while simultaneously avoiding any penalties that may be imposed for their act of bullying (Yen et al., 2013).

Owing to the characteristics inherent in the developmental period of preadolescence and early adolescence, social-relational bullying victimisation can be particularly damaging, as it may decrease a learner's social status in the peer group and prevent him or her from participating in his or her social groups. In fact, Thomas et al. (2016) found that victims of indirect bullying (i.e., social-relational) had the highest levels of psychological distress and poorest emotional well-being. Thus, the identification and mitigation of factors that contribute to this form of victimisation during preadolescence and adolescence is of paramount importance. As opposed to the anger in physical bullying victimisation, internalising symptoms such as feelings of anxiety and depression were related significantly to social-relational bullying victimisation (Boel-Studt & Renner, 2013; Marini et al., 2006). Such findings suggest that the type of victimisation experienced (i.e., direct versus indirect) might be the result of the kind of behaviour displayed by the victim (i.e., externalising versus internalising). However, Tom et al. (2010) found that aggressive behaviour in Chinese learners (not taking into account the moderating role of gender) had a stronger correlation with social-relational bullying victimisation, as opposed to direct forms of victimisation. In other words, externalising problem behaviour was more strongly related to indirect bullying victimisation. However, such results may be attributed to the cultural context in that the collectivistic nature of this culture (i.e., emphasising group perspective and belonging, and suppressing physically aggressive behaviour) might cause learners to employ social-relational means of bullying regardless of the type of behaviour displayed by the targets. A study conducted by Elledge et al. (2013) further emphasises the role of contextual factors, who

found that when learners collectively perceived their teacher as able to intervene effectively to stop overt (direct) bullying, they might increasingly resort to more covert forms of bullying (i.e., social-relational and in cyberspace) that are more difficult to detect or monitor.

It is imperative to identify individual and contextual factors that place learners at risk for involvement in direct and indirect forms of bullying. As will be evidenced in the next section, bullying is occurring at high prevalence rates internationally and in South Africa. By identifying all the risk factors, prevention and intervention strategies can be implemented early with the goal of reducing the rates at which bullying is occurring at present.

3.5 Prevalence

3.5.1 Traditional bullying

3.5.1.1 *International findings.* Internationally, there appears to be inconsistencies in prevalence rates for both traditional bullying and cyberbullying perpetration and victimisation. Possible reasons for such discrepancies include the use of different definitions for bullying and cyberbullying (i.e., definitions that capture different components of bullying), as well as differences in sample characteristics (e.g., age range and location), measurement techniques (e.g., self-report, peer nominations, and teacher report), and measuring instruments (Selkie, Fales, & Moreno, 2016; Sittichai & Smith, 2015; Vivolo-Kantor, Martell, Holland, & Westby, 2014). With regard to the latter, prevalence rates may also be affected by factors such as the inclusion of a definition of bullying or even just the term “bullying” in measuring instruments (Modecki et al., 2014; Vivolo-Kantor et al., 2014), as well as the time frame used for reporting bullying perpetration and victimisation (Vivolo-Kantor et al., 2014). On the other hand, it has been suggested that cultural factors may influence the acceptability of such behaviour, resulting in differing prevalence rates across countries (Walsh & Cosma, 2016). An overview of international bullying prevalence rates (including European, African, and Asian countries, in addition to Australia and the United States) for three broad developmental periods are provided in Table 1.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 1

International Prevalence Rates of Bullying Perpetration and Victimization

Developmental period	Role in Bullying	Prevalence	Researchers
Childhood (Grades 1 – 4) ^a	Perpetrator	6% – 32.9%	Fanti & Georgiou, 2013; Jenson et al., 2013; Luxenberg et al., 2015; Monks et al., 2012; Sittichai & Smith, 2015; Von Marees & Petermann, 2010
	Victim	8.7% – 38.5%	
	Bully-victim	4.6% – 16.5%	
Preadolescence (Grades 5 – 6) ^b	Perpetrator	4.9% – 22.1%	Fanti & Georgiou, 2013; Habashy Hussein, 2013; Jansen et al., 2011; Jenson et al., 2013; Kokkinos, 2013; Lereya et al., 2015; Luxenberg et al., 2015; Monks et al., 2012; Tanrikulu & Campbell, 2015
	Victim	7.9% – 28.5%	
	Bully-victim	3.5% – 9.9%	
Adolescence (Grades 7 -12) ^c	Perpetrator	2.4% – 8.6%	Jansen et al., 2011; Kubwalo, Muula, Siziya, Pasupulati, & Rudatsikira, 2013; Lereya et al., 2015; Lucia, 2016; Luxenberg et al., 2015; Owusu, Hart, Oliver, & Kang, 2011; Sittichai & Smith, 2015; Tanrikulu & Campbell, 2015
	Victim	5.8% – 44.5%	
	Bully-Victim	2.1% – 17.6%	

^aChildhood ranges from age 6 – 9 years; ^bPreadolescence ranges from age 10 – 12 years; ^cAdolescence ranges from age 13 – 18 years

The wide prevalence range for each bullying category (i.e., perpetrator versus victim versus bully-victim) presented in Table 1 emphasises the difficulty in comparing the bullying rates of different studies. From most studies, though, it is evident that the reported victimisation rates (for childhood, preadolescent, and adolescent samples) exceeded the number of perpetrator-only learners and the number of bully-victims. Furthermore, the majority of studies identified the bully-victim category as having the smallest number of learners, although a few studies instead reported the perpetrator-only group as being the smallest category. Finally, the majority of learners who were not involved in bullying as

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

either a perpetrator, victim, or bully-victim (at neither primary nor high school level) constituted the largest group in all of these studies.

Prevalence rates from over 40, mostly Western countries are available from the Health Behaviour in School-aged Children (HBSC) surveys, which collect data from 11-, 13- and 15-year-old samples every 4 years. The countries surveyed were mostly European, but also included the United Kingdom, Canada, the Russian Federation, Israel, and Ukraine. Bullying perpetration and victimisation rates are calculated from a single bully and victim item (adapted from the Olweus Bully/Victim Questionnaire), taken from a threshold of ‘at least two or three times in the past couple of months’ or more. The 2013/2014 survey yielded average rates of 7% for bullying others, and 13% for being bullied in nationally representative samples of 11-year-olds (Walsh & Cosma, 2016). The prevalence rates for bullying perpetration slightly increased with age (9% in 15-year-olds), whereas victimisation decreased with age (8% in 15-year-olds). Although the figures of several studies from Table 1 roughly resemble the average prevalence rates reported in the HBSC survey, other studies found rates that are far above or below these rates.

3.5.1.2 South Africa. Even though research on bullying has increased in South Africa, it is still regarded as limited when compared to international literature on the subject. Furthermore, most of these South African studies report bullying prevalence rates for adolescents (i.e., high school samples consisting of Grades 8 – 12; ages 13 - 18), rather than for children and preadolescents in primary schools. In those studies examining bullying in adolescent samples, the following prevalence rates were reported: 3.9–49% for perpetrators; 13–60.2% for victims; and 5.5–34% for bully-victims (Burton & Leoschut, 2013; Liang, Flisher, & Lombard, 2007; Mlisa et al., 2008; Penning & Govender, n.d.; Townsend, Flisher, Chikobvu, Lombard, & King, 2008). Consistent with international findings, more learners reported being victims of bullying as opposed to belonging to the perpetrator-only or bully-victim groups. The first, second, and third South African National Youth Risk Behaviour Surveys, conducted in 2002, 2008, and 2011 respectively, also revealed that between 33.8% and 41% of high school learners had been bullied in the month preceding the survey (Reddy et al., 2003; Reddy et al., 2010; Reddy et al., 2013), with the Free State consistently remaining one of the provinces with the highest rates of bullying victimisation (49.3% in 2002; 44.4% in 2008; and 38.8% in 2011). Additional support for the seriousness of this problem can be derived from a study conducted by De Wet (2005a), who found that only 16.22% of high school learners in the Free State Province felt that bullying was *not* a problem

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

at their schools. In comparison to international prevalence rates (see Table 1), bullying involvement in South Africa appears to be much higher. Except for the reasons already discussed (e.g., differences in bullying measures), Townsend et al. (2008) add that these discrepancies might be the result of the maturity of research on bullying, as well as the possible positive effect that intervention and prevention programmes have had on bullying in those (developed) countries (e.g., the United States and Western European countries).

Compared to studies involving high school samples, data for bullying in primary schools are even scarcer. A study conducted by Smit (2003) revealed that 25% of Grade 4 learners indicated that they were “sometimes” bullied during the past school term, whereas 20% of the learners admitted to bullying others “sometimes”. A further 8% and 5% of learners were involved in more frequent bullying victimisation and perpetration respectively (i.e., bullying occurring at least once a week, or several times a week). Nesor, Ladikos, and Prinsloo (2004) reported that 44% of Grade 6 learners and 47.3% of Grade 7 learners witnessed bullying at their schools on a daily basis, whereas almost half (49%) of Grade 6 learners reported being “frequently bullied.” In the Free State Province specifically, Greeff and Grobler (2008) found that in a sample of Grade 4 to 6 learners, more than half (56.4%) of the learners experienced some kind of bullying victimisation.

3.5.2 Cyberbullying

3.5.2.1 *International findings.* A systematic review conducted by Selkie et al. (2016) on 81 manuscripts representing 58 unique studies, revealed that cyberbullying perpetration ranged from 1% to 41% for middle and high school learners (ages 10–19), whereas victimisation rates fell between 3% and 72%. Even in an electronic environment, bully-victims again formed part of the smallest group, ranging from 2.3% to 16.7%. Other studies found that the category of cyber bully-victims included the most learners, which possibly indicates how lack of face-to-face interaction in the electronic environment might make it easier for learners to initiate and respond with acts that constitute bullying (Mishna et al., 2012). The 2013/2014 HBSC survey reported that on average, 3% of 11-year-olds were victims of cyberbullying (Walsh & Cosma, 2016).

3.5.2.2 *South Africa.* In comparison to cyberbullying, traditional forms of bullying in South Africa were found to be much more prevalent (Tustin, Zulu, & Basson, 2014), which is in line with the findings of several international studies (Callaghan et al., 2014; Luxenberg et

al., 2015; Modecki et al., 2014; Tanrikulu & Campbell, 2015). In fact, an extensive study conducted by the University of South Africa (UNISA) on high school learners in various provinces in South Africa showed that of the 23.3% Gauteng high school learners who reported bullying others, only 1.3% engaged in cyberbullying perpetration (Youth Research Unit, 2012). Similarly, the same study indicated that of the 34% high school learners in Gauteng and the Western Cape who reported to be victims of bullying, only 15.2% of learners fell victim to cyberbullying (compared to 40.6% and 62.8% of physical and emotional bullying respectively) (Tustin et al., 2014). Furthermore, a qualitative study conducted on Grade 6 and 7 South African learners revealed that although they referred to various types of traditional acts as bullying, none of them raised the issue of cyberbullying (Coertze & Bezuidenhout, 2013). This could promote the idea that cyberbullying is a less prevalent phenomenon in this developmental period. Nevertheless, some studies still found cyberbullying to be a frequent occurrence that affects a significant number of adolescents negatively (Selkie et al., 2016).

Even though the general decreasing trend of bullying over the years can be regarded as positive (Chester et al., 2015; Rigby & Smith, 2011; Schneider, O'Donnell, & Smith, 2015), it is still maintained that such behaviours are fairly common experiences in schools, which warrants further research and implementation of intervention programmes (Walsh & Cosma, 2016). Together with the fact that relatively little research that examined the correlates of specific forms of bullying perpetration and victimisation exists, the continuing high prevalence of bullying underscores the importance of additional research, including the contributions that will be made by the current study.

3.6 Demographic Characteristics

It is crucial to study the role of various demographic characteristics (e.g., age, gender, and ethnicity) in traditional bullying and cyberbullying to gain a broader understanding of these phenomena. As such characteristics can be linked with power and status (Hanish et al., 2013)—one of the core components in the definition of bullying—it becomes even more important to consider their individual and/or joint contributions. Furthermore, developmentally based research that considers these various demographic traits will aid in designing appropriate prevention and intervention efforts, as well as policies, with regard to bullying (Hanish et al., 2013; Wang et al., 2009).

3.6.1 Traditional bullying

3.6.1.1 Age. No consistent pattern exists across studies regarding the trend that bullying perpetration follows with age. Several studies (Connell et al., 2015; Fanti & Georgiou, 2013; Haltigan & Vaillancourt, 2014; Wang, Ianotti, et al., 2012), including a recent systematic review (Álvarez-García et al., 2015) and a meta-analysis (Mitsopoulou & Giovazolias, 2015), found that bullying perpetration mostly follows a pattern in which it gradually increases during the primary school years until about age 14, after which it decreases. However, some studies indicate that this decrease occurs even earlier (i.e., from age 11-12) (e.g., Shetgiri, Lin, Avila, & Flores, 2012). In fact, when older adolescents and adults were asked about their bullying experiences over their entire school career, it was reported that most bullying perpetration took place during preadolescence (Eslea & Rees, 2001; Frisén et al., 2007).

Various explanations, including ethological (biological developmental), developmental trajectories, and contextual aspects, have been proposed for this curvilinear relationship between bullying perpetration and age. For example, from an ethological perspective, children engage in bullying as an attempt to attain social dominance or status in the peer group (Guerra et al., 2011; Liu & Graves, 2011; Thornberg, 2010). This is especially evident during the transition from elementary (Grade 5) to middle school (Grade 6), where changing school settings might urge children to use bullying to re-negotiate their friendship groups and position in the social hierarchy of the school (Williford, Boulton, & Jenson, 2014). Subsequently, as this social hierarchy stabilises with increasing age (i.e., when the child's status is established), bullying perpetration may decrease.

However, it has been suggested that fluctuations in bullying perpetration during preadolescence can be attributed to factors other than school transition, as is evidenced by increased bullying perpetration rates even in school systems where no such transition takes place between Grade 5 and 6 (e.g., Farmer, Hamm, Leung, Lambert, & Gravelle, 2011). Further highlighting the idea that bullying perpetration might be a developmental (i.e., changes with age) rather than contextual (i.e., changes with setting) process, Wang, Brittain, McDougall, and Vaillancourt (2016) found that there were no increases in bullying perpetration as children moved from Grade 5 to Grade 6, regardless of whether a school transition took place or not. Consequently, it was hypothesised that fluctuations in bullying prevalence is rather associated with puberty—a normative process that gradually begins in the

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

preadolescent years (Ellis et al., 2012). For example, higher bullying perpetration rates could be the result of the influence of puberty on a preadolescent's physical appearance, as reaction to perceived physical deviance is one of the main reported causes for bullying perpetration (Lemstra, Nielsen, Rogers, Thompson, & Moraros, 2012; Thornberg, 2010). Furthermore, increased levels of testosterone during pubertal maturation are associated with a stronger need for social dominance in boys, thus accounting for why boys often display higher rates of overt bullying (Ellis et al., 2012). Such behaviour is maintained as perpetrators feel superior to their peers (status), without losing the affection from their friends or significant peers—the second major goal in preadolescence (Huitsing et al., 2014). Therefore, the physical maturation processes, increased opportunities for mating, as well as greater exposure to competitive contexts all increase the need to achieve some form of status or dominance (in any manner possible), especially in the period of preadolescence (Sijtsema, 2016). Additional changes also seem to appear as puberty progresses. For example, Williford et al. (2016) found a natural decline in children's levels of cognitive empathy as they progressed from fourth to sixth grade, thereby increasing the levels of bullying perpetration. The subsequent decreasing trend for bullying perpetration over the remainder of the adolescent years could be the result of an increase in empathy as preadolescents enter the periods of middle and late adolescence (Allemand, Steiger, & Fend, 2015).

Still, other studies found the number of reported bullies to remain stable, or even increase from early to late adolescence (e.g., Meland et al., 2010; Tippett et al., 2013). The absence of a decreasing trend in bullying perpetration possibly may reflect the use of such behaviour as a way of enhancing one's status as a desirable, romantic partner for the opposite sex that is restricted not only to the period of preadolescence (Guerra et al., 2011). In addition, Rew et al. (2012) examined how coping strategies change as children progress through preadolescence and found an increase in the use of maladaptive coping strategies such as “picking on someone” and “yelling and screaming”. Although this study examined only a narrow age range (Grade 4–6), it is possible that these less severe aggressive behaviours, having started as maladaptive forms of coping with stress, might become habitual over time and develop into bullying perpetration.

It is also possible that bullying perpetration (and victimisation) rates may only appear to be decreasing with age. While physical bullying is employed (and experienced) more frequently by younger children and adolescents, older adolescents would rather engage in social-relational bullying (Farrell et al., 2014; Williford et al., 2011). Thus, it may be that

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

bullying is only becoming more difficult to detect, as opposed to a true decline in prevalence rates.

Nevertheless, the majority of studies reveal that children experience lower levels of victimisation as they age (Boyes et al., 2014; Haltigan & Vaillancourt, 2014; Tippett et al., 2013; Walsh & Cosma, 2016; Williford et al., 2014). Possible explanations for this downward trend include the reluctance of older learners to disclose their victimisation experiences, younger learners having more older learners in the school who are in a position to bully them, and older learners having acquired more advanced social skills (e.g., assertiveness) for successfully dealing with situations in which they are or might be bullied (Neser, Ovens, Van der Merwe, Morodi, & Ladikos, 2003; Smith, Madsen, & Moody, 1999). Because of more advanced cognitive development, older learners may also have a more differentiated understanding of the concept of bullying compared to younger learners, who may ignore the definitional characteristics of bullying (e.g., power imbalance or repetition) and consequently report any aggressive act as a form of bullying (Monks & Smith, 2006; Ucanok et al., 2011).

Furthermore, these age trends, namely curvilinear for bullying perpetration and a consistent downward trend for victimisation, could be explained by the developmental trajectories that different bullying groups (i.e., bully, victim, and bully-victim) seem to follow. Even though all bullying groups show some degree of stability over time, the perpetrator role appears to be the most stable (Burk et al., 2011; Haltigan & Vaillancourt, 2014; Sapouna et al., 2012; Williford et al., 2014). For example, a study conducted by Lereya et al. (2015) showed that bully-victims at age 13 were most likely to have been bully-victims or (passive) victims at age 10, which emphasises the increased involvement of victims in later perpetration of bullying. Similarly, Haltigan and Vaillancourt (2014) demonstrated that it was more likely for children to follow a pathway from victimisation to involvement in future bullying perpetration, than it was to follow a pathway from bullying perpetration to victimisation. The findings from such studies could account partly for the decreasing trend seen in victimisation, but the increasing or persisting trend found in bullying perpetration. However, findings from several other studies would contradict such deductions. For instance, the victim role was found to be more stable than the perpetrator role in some cases (Jose, Kljakovic, Scheib, & Notter, 2012), and children are more likely to move between different groups of bullying rather than remain in one group over time (Williford et al., 2011). Additionally, the reciprocal patterns that appear to exist between bullying roles over time (i.e., prior bullying perpetration leads to subsequent victimisation, and prior victimisation leads to future bullying

perpetration), and the fact that significant unidirectional pathways were found only from bullying perpetration to victimisation for social and verbal bullying all seem to question developmental trajectories as a significant explanation for these age trends (Jose et al., 2012; Marsh et al., 2011). Despite the confusion surrounding the exact age or school grade at which bullying occurs most frequently, it remains clear that preadolescents are at an elevated risk for engaging in such behaviour.

3.6.1.2 Gender. In addition to age, certain gender patterns have also emerged from international and South African literature on bullying. Overwhelming support exists that boys are more likely to be involved in bullying in general, but particularly in direct (overt) physical bullying as perpetrators or bully-victims (Álvarez-García et al., 2015; Cook et al., 2010; Erginoz et al., 2015; Griezel et al., 2012; Habashy Hussein, 2013; Kelly et al., 2015; Lapidot-Lefler & Dolev-Cohen, 2015; Lucia, 2016; Wu et al., 2015). Only with regard to bullying subtypes, some studies found that girls were as likely (Connell, Schell-Busey, Pearce, & Negro, 2013; Griezel et al., 2012; Smith, Thompson, & Bhatti, 2012; Vieno et al., 2011), or perhaps even more likely (Arslan et al., 2012; Biggs et al., 2010; Smith, Polenik, et al., 2012; Wang et al., 2009) than boys to employ, as well as to experience, indirect forms of bullying. This gender difference in type of bullying may reflect the psychosocial development of early adolescents: Boys might engage in more direct, visible bullying to establish their dominance in their larger peer groups; whereas girls (who usually prefer smaller and more intimate friendships) might rather participate in indirect forms of bullying to hurt someone more effectively (Rivers & Smith, 1994; Scheithauer et al., 2006).

The gender difference for bullying victimisation appears to be more inconsistent: Whereas some studies indicate that boys are more often the victims of bullying compared to girls (Callaghan et al., 2014; Lapidot-Lefler & Dolev-Cohen, 2015; Tippett et al., 2013; Walsh & Cosma, 2016), others found the opposite to be true (Kahle & Peguero, 2015; Meland et al., 2010; Reddy et al., 2013). In contrast, numerous studies found minimal or no gender difference (Beckman et al., 2013; Boyes et al., 2014; Kelly et al., 2015; Kubwalo et al., 2013; Sittichai & Smith, 2015). Again, these inconsistencies possibly could depend on the type of victimisation: Whereas boys are more likely to experience direct bullying, girls more often have to endure indirect, social-relational bullying victimisation (Arslan et al., 2012; Boyes et al., 2014; Tustin et al., 2014).

3.6.1.3 Ethnicity. Whereas gender differences have always been considered as important in child development, less attention has been given to the role of race and ethnicity (García Coll et al., 1996). Even in literature on bullying, although many studies have included ethnically diverse samples, only a few studies have investigated directly whether there are ethnic differences in bullying perpetration and/or victimisation (Brown, Arnold, Dobbs, & Doctoroff, 2007). The limited research that has been conducted produces contradicting results (Hong & Espelage, 2012; Tippett et al., 2013). For example, a recent systematic review conducted by Álvarez-García et al. (2015) analysed 85 articles published between 2005 and 2014. Findings revealed that in some racial or ethnic minority groups (e.g., the African American group), adolescents were more likely to engage in bullying perpetration compared to the majority groups (e.g., the white group). Such findings resonate that which was found in a review of bullying among African American adolescents, namely that this ethnic group displayed higher rates of bullying perpetration as compared to other learners (Albdour & Krouse, 2014). However, Álvarez-García et al. (2015) also found that in some ethnic groups, bullies are more prevalent in the majority groups rather than in the minority groups. Thus, results appear to be dependent on the specific ethnic majority and minority groups included in a study.

Similar results appear in literature on bullying victimisation, with some racial and ethnic minority groups reporting more, and other groups reporting less victimisation than the majority group (Hong & Espelage, 2012; Kahle & Peguero, 2015; Lehman, 2014; Spriggs, Iannotti, Nansel, & Haynie, 2007; Tippett et al., 2013). The South African National Youth Risk Behaviour Surveys indicate that white high school learners reported higher rates of bullying victimisation than the black learners did (Reddy et al., 2003; Reddy et al., 2010; Reddy et al., 2013), but a lower victimisation percentage than coloured learners (Reddy et al., 2010; Reddy et al., 2013). Still, other studies found no significant ethnic differences in bullying others, or being victimised (Boel-Studt & Renner, 2013; Connell et al., 2015; Smith, Thompson, et al., 2012; Williams & Kennedy, 2012).

Thus, a complex relationship would appear to exist between ethnicity and bullying. In fact, a study conducted by Wang, Iannotti, et al. (2012) found that any differences in race and ethnicity were specific to a certain gender or type of bullying, which offers a possible reason why inconsistencies exist in the literature. For example, a South African study showed that no ethnic differences existed between black and white primary school learners for bullying victimisation (Greeff & Grobler, 2008). In fact, only when type of bullying was examined,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

significant differences were found: Black learners were significantly more exposed to racial bullying (i.e., comments about race and colour) compared to white learners. Another South African study also found that while frequent bullying victimisation was reported more often by black and coloured learners as compared to white or Asian groups, when specific types of bullying were being considered, white learners reported higher rates of verbal and relational bullying victimisation than their black counterparts (Neser et al., 2004). Reddy et al. (2003) and Reddy et al. (2010) further found that there were no significant gender differences in being bullied in their multiethnic South African samples, with the exception that white and coloured female learners experienced higher rates of bullying victimisation than white and coloured male learners respectively. Thus, it would appear that future studies should investigate the interaction between gender and ethnicity with regard to different types of bullying perpetration and victimisation.

Several explanations could be offered for the ethnic group differences in bullying. It is possible that contextual factors, in conjunction with ethnicity, perhaps could account better for differences in bullying. For example, diverse parenting practices across racial and ethnic groups could explain partly the differences in bullying perpetration or victimisation between these groups (Shapka & Law, 2013), a point that is discussed further in the chapter on parenting (Chapter 4). Different prevalence rates across countries could also indicate that even wider cultural factors (e.g., understanding of the concept of bullying and the cultural acceptability of such behaviour) are responsible for differing prevalence rates between ethnic groups (Walsh & Cosma, 2016).

Moreover, studies such as those conducted by Vervoort, Scholte, and Overbeek (2010) as well as Connell et al. (2015) highlight the importance of considering the ethnic composition of a school when studying the relations between ethnicity and bullying. For example, higher levels of bullying perpetration and victimisation were found in more ethnically diverse classes, which proposes the idea that numerical differences in racial and ethnic groups intensifies the imbalance of power between and in such groups. In turn, this would lead to increased rates of bullying perpetration and victimisation in certain racial and ethnic groups. A study conducted by De Wet (2005a), who found that ethnic composition appeared to influence the extent of racial bullying in some Free State secondary schools, supports this argument.

Another possibility accounting for differences in bullying between ethnic groups is related to the fact that some groups are more likely than others to live in conditions characterised by higher rates of poverty (DeNavas-Walt & Proctor, 2015; Statistics South Africa, 2015). As such, communities have increased levels of exposure to crime or violence (Friedson & Sharkey, 2015), and one could reasonably expect that socioeconomic status might contribute to their bullying. In fact, several studies have shown that increased bullying perpetration and victimisation rates were associated with lower family affluence or socioeconomic status (Shetgiri, Lin, & Flores, 2012; Walsh & Cosma, 2016; Wilson et al., 2013). However, the systematic review conducted by Álvarez-García et al. (2015) revealed that the overall level of socioeconomic status was a less important factor in determining the probability that a learner would be involved in bullying as a perpetrator.

3.6.2 Cyberbullying. As with traditional bullying, findings regarding the influence of demographic characteristics on cyberbullying rates are mixed, probably because cyberbullying is a relatively new field with fewer studies having been conducted on the subject. According to Kowalski et al. (2014), such variability in findings further acknowledges the fact that no single prevention or intervention programme can fully address the problem of traditional bullying and cyberbullying in different populations.

3.6.2.1 Age. Some studies on cyberbullying reflect the age trends found in traditional bullying, in that cyberbullying perpetration rates peak during early adolescence, whereafter it decreases (Bauman, 2010; Patchin & Hinduja, 2011; Topcu, Yildirim, & Erdur-Baker, 2013). Other studies showed greater cyberbullying perpetration involvement with increasing age, possibly due to reduced parental monitoring in older adolescents, improvements in their technological skills, and/or greater access to various social network platforms (e.g., Facebook) where such bullying could take place (Carter & Wilson, 2015; Schultze-Krumbholz et al., 2015; Walrave & Heirman, 2011). Still, several studies demonstrate only little, if any, variation in cyberbullying perpetration rates across age groups (Carter & Wilson, 2015; Connell et al., 2013; Deniz, 2015; Tanrikulu & Campbell, 2015).

With regard to cyberbullying victimisation, Cross et al. (2015) found that it differed to the trend found in traditional bullying victimisation, as cyberbullying victimisation appears to remain more stable instead of decrease over time. Further supporting this point are studies conducted by Connell et al. (2013), who found that learners were more likely to be cyberbullied if they were older; as well as Monks et al. (2012), who found that older learners

(ages 10–11) experienced more types of cyberbullying victimisation than younger learners (ages 7–9) did. However, some studies reflect a similar decreasing trend for cyberbullying victimisation, as found in traditional bullying victimisation (Schneider et al., 2015). The 2013/2014 HBSC survey found that whereas cyberbullying victimisation gradually decreased with age for boys, a less clear pattern existed for girls. Furthermore, Kowalski et al. (2014) conducted a meta-analysis that included studies with middle school, high school, and/or college samples. The results revealed only a weak positive relationship between age and cyberbullying perpetration, but no significant relationship between age and cyberbullying victimisation. Regardless of these inconsistencies found in the literature, findings point toward the fact that cyberbullying is not restricted to only one age group.

As with traditional bullying, reciprocal relationships between bullying perpetration and victimisation also appear to exist in the cyber domain, with the majority of youth who reported that they cyberbullied others were in fact cyberbullied themselves, and vice versa (Connell et al., 2013; Burton & Mutongwizo, 2009). However, it is not possible to determine whether the perpetrating act preceded or followed from the victimisation, due to the cross-sectional nature of these studies. Such reciprocity is questioned, however, as some researchers only find significant unidirectional pathways from one cyber act to another (e.g., cyberbullying perpetration predicted future victimisation, but not vice versa) (Jose et al., 2012).

3.6.2.2 Gender. It is still unclear how different genders may be involved as perpetrators and/or victims in the cyber context (Connell et al., 2013; Kowalski et al., 2014). Some studies found that, as with traditional bullying, boys were more likely to engage in cyberbullying as a bully, bully-victim (Lapidot-Lefler & Dolev-Cohen, 2015; Tanrikulu & Campbell, 2015; Topcu et al., 2013; Wong et al., 2014), or victim (Deniz, 2015; Wong et al., 2014). These findings would reflect the considerable overlap between traditional bullying and cyberbullying.

In contrast, many studies support the notion that cyberbullying is more indirect in nature, with more girls involved in cyberbullying (Barboza, 2015; Barlett & Coyne, 2014; Beckman et al., 2013; Rice et al., 2015). This higher involvement of girls in cyberbullying could be explained by the fact that girls are more likely than boys to disclose their victim status (Callaghan et al., 2014), or that normally submissive girls feel less inhibited by the anonymity of online interactions, which encourages aggressive acts (Ybarra & Mitchell,

2004). In addition, several researchers believe that gender patterns in cyberbullying occur because of sex differences in accessing technological devices, or preferences in using different platforms of technology (e.g., e-mails and text messaging) (Griezel et al., 2012; Hinduja & Patchin, 2008; Monks et al., 2012; Slonje & Smith, 2008). However, other studies found no conclusive evidence for such claims (Bauman, 2010; Beckman et al., 2013). Yet, some studies found that while boys were more involved in cyberbullying as perpetrators, girls were more likely to be victims (e.g., Tarablus et al., 2015).

Such findings that highlight the differences between males and females in cyberbullying further emphasise the need for gender-specific research, as it provides insight into how anti-bullying prevention programmes may be tailored for each gender (Connell et al., 2013). However, others report that no gender differences in cyberbullying perpetration and/or victimisation exist (Carter & Wilson, 2015; Lapidot-Lefler & Dolev-Cohen, 2015; Tustin et al., 2014), which possibly confirms that the role of gender in interpersonal interactions in an electronic environment is negligible (Hinduja & Patchin, 2008). Even the 2013/2014 HBSC survey (which examined bullying in over 40 countries) could find no consistent pattern for gender differences in cyberbullying victimisation (Walsh & Cosma, 2016). Furthermore, a South African-based study reports that even though more girls claim to be cyber victimised compared to boys, gender was still found to be an unlikely predictor of cyberbullying (Burton & Mutongwizo, 2009).

Gender differences in cyberbullying also appear to differ between cultures, as found by a meta-analytic study conducted by Barlett and Coyne (2014). Whereas gender differences in cyberbullying perpetration were found in certain continents (e.g., North America, Europe, and Asia), none were found in others (e.g., Australia). Such findings further emphasise the important contributions of culture, race, and ethnicity to the development of cyberbullying.

3.6.2.3 Ethnicity. As with traditional bullying, literature on the role of ethnicity in cyberbullying remains scant and inconsistent. Barboza (2015) found that even though higher proportions of white youths were victims of traditional bullying, non-white youths were more likely to be highly victimised by all forms of traditional bullying and cyberbullying. Burton and Mutongwizo (2009) concluded that South African black youths experienced more cyberbullying compared to white, coloured, Indian/Asian youths, whereas Rice et al. (2015) found that American white youth were more likely to be victims of cyberbullying, or to experience both cyberbullying perpetration and victimisation simultaneously. With regard to

cyberbullying perpetration, it was found that more African-American youths were involved relative to the white learners (Low & Espelage, 2013; Patchin & Hinduja, 2011; Wang et al., 2009). Contradictory findings were provided by Marcum et al. (2012), who found that white undergraduate students were more likely to be cyberbullies than black students were. Yet, certain studies claim that no significant ethnic or racial differences in cyberbullying perpetration and/or victimisation exist (Barboza, 2015; Smith, Thompson, et al., 2012).

Considered together, it would appear that the literature on the role of demographic factors (i.e., age, gender, and ethnicity) in both traditional bullying and cyberbullying delivers many inconsistencies. Zych et al. (2015) conducted a systematic review of reviews and meta-analyses on bullying and cyberbullying to examine the main findings of the review studies and to analyse the effect sizes of the meta-analyses. In terms of demographic characteristics, it was found that for both age and gender differences there were inconsistent results with only trivial effect sizes. However, a small effect size was found favouring higher traditional bullying perpetration among boys, and that the relationship between bullying perpetration and age might be curvilinear. Furthermore, it was found that even though it appears that some ethnic minorities suffer more bullying victimisation than the majority group does, ethnic minority status was not a prerequisite for higher bullying victimisation. This study concluded by stating that no simple correlations seem to exist between bullying and demographic characteristics. The effects of these demographic characteristics might differ, depending on the presence (or absence) of other risk and protective factors—thus requiring more advanced analyses.

3.7 Developmental Outcomes

3.7.1 Traditional bullying

3.7.1.1 Individual level. A considerable number of researchers have documented the negative effects of bullying (and cyberbullying) on all those involved (i.e., perpetrators, targets, and bully-victims). In fact, García and Margallo (2014) reviewed scientific articles related to bullying and cyberbullying and found that health consequences of bullying was the second most researched topic in the literature on bullying. Moreover, it would appear that learners, regardless of their bullying role (perpetrator versus target) or domain in which bullying occurs (traditional versus cyber) may report similar health concerns (Kowalski & Limber, 2013). Such findings illustrate the developmental psychopathology principle of

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

equifinality. For example, many emotional and psychological problems (including feelings of depression, anxiety symptoms, loneliness, posttraumatic stress, and low life satisfaction) can be observed in both perpetrators and victims of bullying (Arslan et al., 2012; Boyes et al., 2014; Callaghan et al., 2014; Cluver et al., 2010; Fitzpatrick, Dulin, & Piko, 2010; Strumpher & Wannenburg, 2014; Kowalski et al., 2014; Lereya et al., 2015; Meland et al., 2010; Ortega et al., 2009; Owusu et al., 2011; Penning & Govender, n.d.; Tarablus et al., 2015).

Whereas bullying victimisation appears to be associated more strongly with internalising symptoms, perpetrators of bullying are at a greater risk for developing externalising problems later (Moore et al., 2014; O'Brennan et al., 2009). Compared to victims, perpetrators were more often involved in antisocial behaviour (Olweus, 2011; Vaughn et al., 2010) and harmful substance use (Sangalang, Tran, Ayers, & Marsiglia, 2016; Vaughn et al., 2010). However, some studies report that victims were also at an increased risk for externalising behaviour and substance use compared to control groups (Busch, Laninga-Wijnen, Van Yperen, Schrijvers, & De Leeuw, 2015; Liang et al., 2007; Wu et al., 2015). Such findings again highlight the reciprocal nature between victimisation and aggression. In a school setting, victims and perpetrators may report feelings of alienation or detachment from their school and classmates, as well as lower school satisfaction (Arslan et al., 2012; Burk et al., 2011; Meland et al., 2010; O'Brennan et al., 2009). Victims may also persistently worry over the bullying, thus affecting their concentration span, which in turn can affect their academic performance negatively (Strumpher & Wannenburg, 2014; Ndebele & Msiza, 2014). Such continuous fear about being bullied may also lead to higher absenteeism of victims (Cross et al., 2015; Ndebele & Msiza, 2014; Wu et al., 2015), feelings of helplessness (Arslan et al., 2012), and various somatic symptoms such as fatigue, sleeping problems, and headaches (Arslan et al., 2012; Meland et al., 2010; Sigurdson et al., 2014).

Besides reporting subclinical symptoms, perpetrators and victims of bullying may also suffer from clinical externalising and internalising disorders (Cluver et al., 2010; Copeland, Wolke, Angold, & Costello, 2013; Vaughn et al., 2010). A particular concern is that learners who had been involved in traditional bullying or cyberbullying in any role (but especially victims or bully-victims) had more suicidal thoughts, as well as a higher likelihood of attempting suicide compared to learners who were not involved in bullying (Hinduja & Patchin, 2010; Kowalski et al., 2014; Owusu et al., 2011; Wang, Zhou, et al., 2012; Winsper, Lereya, Zanarini, & Wolke, 2012; Wu et al., 2015). Some studies revealed that the effect of bullying on victims worsened as the frequency of attacks increased (Cluver et al., 2010;

Meland et al., 2010). For example, Lemstra et al. (2012) found that 37.3% of youths who reported being bullied physically many times a week have a depressed mood compared to 16.2% and 8.1% of youths who were bullied physically at rates of once or twice per month and never respectively. Furthermore, the duration of bullying also affects the severity of adjustment problems, with chronically victimised youths experiencing higher levels of psychological and behavioural problems compared to learners who endured bullying only for a limited period (Bowes et al., 2013; Menesini, Modena, & Tani, 2009).

It has often been suggested that bully-victim status pose a greater risk, causing learners to function at an even lower level than either perpetrators or victims (e.g., Veenstra et al., 2005). They often present with high levels of internalising and externalising symptoms, thus yielding both perpetrator- and victim-like profiles (Burk et al., 2011; Kelly et al., 2015; Lereya et al., 2015; Sigurdson et al., 2014). In fact, bully-victims regularly present at the extreme ends of the bullying spectrum, with higher levels of externalising symptoms than perpetrators, and/or more severe (or at the same level of) internalising symptoms than passive victims (Burk et al., 2011; Copeland et al., 2013; Powell & Ladd, 2010). In other words, they may present with the greatest variety of adjustment problems. For example, numerous studies found that bully-victims showed similar (or even higher) levels of somatic and psychological symptoms than victims did (Arslan et al., 2012; Fitzpatrick et al., 2010; Meland et al., 2010; Wang, Zhou, et al., 2012), whereas Wu et al. (2015) and Copeland et al. (2013) found that bully-victims were at the highest risk for suicidal ideation, suicidal attempts, and self-harm behaviour. Furthermore, Burk et al. (2011) established that in comparison to other bullying groups, bully-victims displayed higher levels of externalising symptoms and problems with attention, and Sangalang et al. (2016) found that bully-victims were greatest at risk for using multiple substances. However, Meland et al. (2010) found that emotional problems in bully-victims were observed only for the learners who were frequently involved in such behaviour.

3.7.1.2 Contextual level. Although it is a topic less researched, it is expected that the consequences of bullying on broader contextual levels may be as detrimental as they are on an individual level. For example, involvement in bullying may alter the interactions and the quality of the relationship between parents and children (Fanti & Georgiou, 2013; Georgiou & Fanti, 2010). Even though both perpetrators and targets of bullying are disliked by their peers, perpetrators are generally less socially isolated than victims are (Wang, Zhou, et al., 2012). Bullying may also decrease school safety, evidenced by the fact that many shootings at schools in the US were conducted by victims of bullying (Jordan & Austin, 2012). The

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

psychiatric and health outcomes associated with bullying perpetration and victimisation may place an extra burden on the health care system, in addition to burdening a country in terms of lawsuits and court cases (Jordan & Austin, 2012).

Moreover, both bullying perpetration and victimisation may burden communities by increasing the rates of adult violence and criminality (Olweus, 2011; Ttofi, Farrington, & Lösel, 2012). Bullying may also affect the economic growth of a society, as learners involved in or experiencing such behaviour may drop out of high school. Subsequently, this could influence the educational aspirations of these learners, leading to lower educational attainment or unemployment in adulthood (Sigurdson et al., 2014; Townsend et al., 2008).

Table 2 provides a synopsis of the developmental outcomes from involvement in bullying as a perpetrator, victim, as well as bully-victim.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 2

Overview of Developmental Outcomes of Bullying

Psychosocial effects of bullying perpetration, victimisation, and perpetration-victimisation

Individual level

Internalising symptoms^a

Feelings of depression, anxiety, and concern^a

Loneliness, post-traumatic stress symptoms, and feelings of helplessness^a

Somatic symptoms (e.g., fatigue, sleeping problems, dizziness, and headache)^a

Poor life satisfaction

Self-harm behaviours, Suicidal ideation, and attempts^a

Internalising disorders

Externalising symptoms^b

Antisocial behaviours (e.g., stealing, harassment, delinquency, and conduct problems)

Harmful substance use

Externalising disorders

School Adjustment Problems

Feelings of detachment or alienation from school and classmates

Lower school satisfaction

Poor academic performance and low educational aspirations

Absenteeism^a

Disliked by peers and social isolation^a

School dropout^b

Contextual Level

Poor parent-child interactions and relationships

Poor school climate

Unemployment in adulthood affecting economy

Community violence and criminality

Financial strain on health care system and legal system

^aMore often associated with bullying victimisation

^bMore often associated with bullying perpetration

3.7.2 Cyberbullying. According to Olweus (2013) and Kowalski et al. (2014), it is often difficult to determine the extent of negative effects of cyberbullying over and above those of traditional victimisation, as most victims of cyberbullying are also victims of traditional bullying. However, studies such as those conducted by Kubiszewski et al. (2015) showed that victims who were exposed to only victimisation in cyberspace had less

psychological distress when compared to learners who were victims of only traditional bullying, or learners who were victimised in both the traditional and cyber domains. Thus, whereas some studies show a stronger correlation between being victimised in different contexts simultaneously and negative health outcomes (e.g., Merrill & Hanson, 2016), others demonstrated that simultaneous victimisation in different domains do not necessarily lead to greater levels of distress as compared to being victimised in one domain only (Kubiszewski et al., 2015). In addition, studies such as that conducted by Slonje and Smith (2008) suggest that the potential effect of cyberbullying on victims might depend on the modality used: Whereas pictures, video clips, and phone calls were rated by adolescents as the most harmful forms of cyberbullying, e-mails and text messages were perceived as having a less harmful effect on learners compared to other forms of cyberbullying.

However, it should be noted that most of the results in the above-mentioned studies were based on cross-sectional data. Thus, as with the discussion on risk factors, it is difficult to determine whether a perpetrator or victim's poor mental health was pre-existing, or emerged from the bullying experience as a consequence. In the case of victims, even though bullying victimisation might appear to lead to various emotional and behavioural problems, it is just as probable that learners who suffer from negative mental health are more likely to be targeted by bullies. In fact, much debate surrounds the direction of effects between victimisation and mental health. In more recent studies, the existence of a reciprocal, bidirectional relationship has been suggested, with pre-existing characteristics of learners making them targets for bullying, which in turn increases the risk for future psychological and behavioural difficulties (Bowes et al., 2013; Boyes et al., 2014; Busch et al., 2015). Regardless, numerous longitudinal studies proved the detrimental effects of bullying by demonstrating how victimisation was associated with psychological and behavioural problems over time; irrespective of a child's pre-existing difficulties or exposure to other psychosocial stressors (Bowes, Maughan, Caspi, Moffitt, & Arseneault, 2010; Boyes et al., 2014; Moore et al., 2014).

3.8 Measurement

From the discussion above, it is clear that bullying perpetration and victimisation (across both traditional and cyber domains) are associated with poor developmental outcomes. Therefore, implementing effective anti-bullying programmes is essential in decreasing the prevalence and effect of these behaviours. However, central to these endeavours is

measurement tools that can identify the frequency of bullying accurately and thereby determine whether these programmes are effective (Thomas et al., 2015). Although there is consensus regarding the definitional criteria of bullying (i.e., aggression, repetition, and power imbalance), how this construct should be assessed still remains a debatable topic. Thus, the discussion that follows first provides an overview of different approaches in measuring bullying (i.e., whether a definition of bullying should be included in an assessment measure and if this construct is better represented in terms of categories or dimensions). Next, self-report measures (the most frequently employed measurement technique) are compared to other tools used to capture bullying. The section concludes with a discussion of the measurement tool used in the current research study, namely the APRI-BT.

3.8.1 Methods of assessment

3.8.1.1 Definition-based versus behaviour-based. Self-report measures, an example of an assessment tool that is discussed in Section 3.8.1.3, can adopt either a definition-based approach or a behaviour-based approach. In the definition-based approach, participants are given a definition of bullying, after which they need to state whether they have been involved in bullying either as a perpetrator and/or as a victim (Thomas et al., 2015). Using a definition is believed to ensure that all participants have a shared meaning of the construct of bullying. However, various researchers utilise different definitions, thus making it difficult to compare prevalence rates across studies. Many of these measures also include the terms “bully” and “victim” in their items. However, there is concern that such terms are inherently negative and may label these learners permanently. For example, studies have found that including the term “bully” in measuring instruments leads to lower prevalence rates in bullying perpetration and victimisation in both traditional and cyber contexts—confirming the reluctance of learners to report endorsing or experiencing such behaviour due to the negative connotation of this label (Felix et al., 2011; Modecki et al., 2014). Moreover, it is uncertain how long or how well participants remember multipart definitions when answering items and whether they do not merely apply their own natural understanding of the construct instead of the definition presented originally (Felix et al., 2011). Finally, it is argued that presenting a definition at the beginning of a questionnaire is not equivalent to operationalising the definitional criteria that make up the definition (e.g., intention and power imbalance), with limited measures attempting to enhance participants’ understanding of these components (Thomas et al., 2015).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

In contrast, behavioural measures present individuals with different types of behaviour that may be called bullying if they are employed or experienced repeatedly (Thomas et al., 2015). Neither a definition of bullying, nor the terms “bully” or “victim” appear anywhere in the measure itself, to avoid the stigma and bias often associated with these terms (Felix et al., 2011). Therefore, these measures would investigate only the presence and frequency of aggressive behaviour. A limitation of this approach is that it typically does not assess power imbalance explicitly, which is one of the core definitional components of bullying (Felix et al., 2011). However, Green et al. (2013) found that the primary definitional item in the Olweus Bully/Victimization Questionnaire (BVQ)—one of the most distinguished measures in the bullying field—may not even be sensitive enough to capture the concept of power imbalance (even after presenting a detailed definition of bullying). Instead, these authors found that the main component of the definition of bullying that would prompt participants to admit to being bullied on the BVQ was that of repetition. In other words, there were much higher odds that learners who experienced repeated victimisation (as measured by a different bullying questionnaire) would also disclose to being bullied on the BVQ as compared to learners who reported victimisation that was not repetitive. Therefore, these authors concluded that the element of repetition mainly contributed to a learner developing an identity as a victim.

It is clear from the discussion above that each method and approach to measurement presents with its own set of strengths and limitations. It has been suggested that different approaches may even identify different types of victims. For example, whereas measures utilising a definition-based approach identify learners who have psychologically accepted the label of being a victim of bullying (“victims”), behavioural-based approaches might rather identify learners who have experienced similar forms of victimisation, but who do not necessarily identify with the victim label (“targets”) (Green et al., 2013; Nielsen, Matthiesen, & Einarsen, 2010). Supporting the notion that definition-based and behavioural-based approaches assess different constructs include studies demonstrating differing prevalence rates. For example, a meta-analytic study conducted by Nielsen et al. (2010) found that whereas behavioural-based measures yielded a prevalence rate of 14.8% for workplace bullying, definition-based measures would reveal rates of 11.3%. Such discrepancies in bullying prevalence rates resulting from the use of different methodologies have also been replicated in literature on bullying at school (Cascardi et al., 2014; Modecki et al., 2014). As each methodological approach measures distinct constructs, researchers have proposed

utilising both measures to comprehend the extent and nature of the phenomenon of bullying fully (Nielsen et al., 2010; Sharkey et al., 2015). In other words, no single approach or method will be able to identify all the different types of victims.

3.8.1.2 *Categorical approach versus dimensional approach.* Data from bullying measures can be either dichotomised to produce categories of “bullies” and “victims” or analysed as continuous constructs. Both approaches provide important information to understanding a particular phenomenon, and using both in a study would probably provide the most detailed picture of the problem at hand (Godleski & Ostrov, 2010). As each approach is defined by different strengths and weaknesses, the preference of one approach over the other should be determined by the type and purpose of the research study.

In the categorical approach, participants would be placed in a certain group if they scored above a specific point (Godleski & Ostrov, 2010). Those with the highest scores on bullying perpetration would be grouped as “bullies,” whereas those with the highest levels of victimisation are regarded as “victims” (Felix et al., 2011). According to Solberg and Olweus (2003), learners can be classified into different categories based on a lower bound cut-off point of “2 or 3 times a month”. Analyses revealed that this cut-off point reasonably distinguished between learners who were involved in bullying (as bullies, victims, or both) and non-involved learners for a variety of psychosocial adjustment variables. Such a tendency to group learners into different bullying categories has also been observed in the literature on cyberbullying (Griezel et al., 2012), with lower cut-off points (e.g., once or twice a month) often being utilised (Beckman et al., 2013).

Although such an approach would enable researchers and clinicians to communicate with ease, many researchers (e.g., Finger et al., 2005) oppose the practice of dichotomising continuous variables, as this would ultimately lead to labelling the learner instead of the behaviour negatively. Identifying with such negative labels may have detrimental effects. For example, Sharkey et al. (2015) found that learners who accepted themselves as victims of bullying reported worse psychosocial functioning compared to learners who were exposed to bullying victimisation, but who did not label themselves as victims. Therefore, it may be more appropriate to focus on the behaviour of a learner who has employed (or experienced) a bullying act, rather than labelling such a learner as a “bully” or a “victim”.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Another limitation of the categorical approach is determining where to draw the boundaries between constructs (e.g., bully and non-bully), which is often defined by a cut-off point. As different values are often used across studies to categorise learners (Solberg & Olweus, 2003), the classification process becomes arbitrary, especially for those who fall just above or below the group cut-off points (Godleski & Ostrov, 2010). In addition, various statistical limitations exist with this approach, such as the loss of large amounts of statistical information, loss of effect size and power, loss of measurement reliability, and potentially overlooking nonlinear relationships (MacCallum, Zhang, Preacher, & Rucker, 2002).

Furthermore, categorisation would imply that these groups are mutually exclusive and stable over time, despite the fact that it has long been recognised that a reciprocal relationship exists between directing proactive forms of aggression towards others (e.g., bullying perpetration) and being a target of proactive aggression (i.e., prior involvement in bullying perpetration increases the likelihood of future victimisation, and prior victimisation contributes to subsequent bullying perpetration) (Price & Dodge, 1989). Such reciprocity between these two seemingly opposite behaviours has also been confirmed by more recent research efforts (Marsh et al., 2011). Researchers advocating dichotomisation (e.g., Solberg & Olweus, 2003) have acknowledged this reciprocity and subsequently classified some learners as “bully-victims” (i.e., learners who engage in perpetrating bullying and victimisation simultaneously). However, Finger et al. (2005) point out that the processes of bullying perpetration and victimisation are complex phenomena that cannot be assessed simply by using categorisation methods. Furthermore, assuming that categories remain stable over time challenges one of the fundamental views of developmental psychopathology, namely that an individual may fluctuate between levels of normality and abnormality (Cicchetti, 2006).

In contrast, the dimensional approach places participants along a continuum where they would be higher or lower on a specific construct such as bullying perpetration or victimisation. As this approach eliminates the use of cut-off scores with its resulting categories, more detailed information can be obtained and in turn, developmental trajectories can be better determined (Godleski & Ostrov, 2010). Therefore, a dimensional model with its emphasis on differences in degrees of problem behaviour between individuals appears to be more applicable for use in studies utilising a developmental psychopathology framework (Cicchetti, 2006).

3.8.1.3 Self-reports. A number of different types of methodologies exist for measuring bullying, including direct behavioural observations, self-reports, teacher reports, and peer nominations (Griffin & Gross, 2004). The questions and aims of a research study usually determine which type of methodology would be most appropriate to assess bullying—albeit self-report is the measurement most often used (Thomas et al., 2015; Vivolo-Kantor et al., 2014).

Self-report measures have numerous advantages. For example, they are cost-effective, can be administered to many learners over a short period, involve little ethical and consent issues, and are easier to implement compared to other methods such as peer nominations and direct behavioural observations (Smith, 2004; Thomas et al., 2015). As self-reports aim at gaining a participant's perspective on a matter, these are more likely to reflect the bullying criteria of intention and power imbalance (Felix et al., 2011; Thomas et al., 2015; Volk et al., 2014). Additionally, the fact that authority figures such as teachers and parents are unlikely to be present when most bullying occur, that learners may conceal their bullying in the form of covert behaviours, and that teachers may not be as attentive or aware of social interactions among learners, all contribute to the idea that preadolescents themselves are in fact in a better position to provide reports of their own behaviour (Felix et al., 2011; Griffin & Gross, 2004; Thomas et al., 2015). Thus, self-reports enable preadolescents to report their behaviour anonymously without fear of others (e.g., peers, teachers, or parents) exacerbating their situation (Casper, Meter, & Card, 2015). Similarly, the lack of overlap between self-report and peer nomination measures can be attributed to the fact that many bullying incidents are subtle and secretive, making it difficult for peers to observe and subsequently nominate peers who they think fit the descriptions of perpetrators or victims (Olweus, 2013). In other words, self-reports may provide information on privately held experiences that would otherwise be missed by using information from other informants. Another limitation of the peer nomination method as an assessment approach is that in many instances, learners bully or are bullied by peers from other grades. As peer nominations usually refer only to learners in the participant's own grade, many experiences of bullying would not be taken into account—a weakness that is overcome by using self-report measures (Olweus, 2013). Furthermore, data from measures such as teacher reports or peer nominations are highly dependent on personal characteristics such as differences in honesty levels and/or definitions of bullying among assessors, which may comprise the reliability of the reports (Griffin & Gross, 2004).

Notwithstanding these strengths, self-reports also contain several limitations. For example, there are concerns regarding participants' reporter and recall biases in their involvement in bullying (Wang, Ianotti, et al., 2012). In addition, problems such as responding inaccurately, denying the severity of problems, lacking awareness of one's problematic behaviour, or wanting to portray oneself in a positive light also exist, especially for perpetrators of bullying (Casper et al., 2015; Griffin & Gross, 2004). Therefore, many studies advocate that information from multiple sources is still superior in gaining in-depth understanding of the phenomenon of bullying (Casper et al., 2015; Wang, Ianotti, et al., 2012). However, most learners regard the task of answering a self-report questionnaire seriously and therefore respond honestly and reliably (Olweus, 2010). Thus, in spite of the above-mentioned weaknesses, self-report measures still appear to be the preferred method for measuring bullying, especially in older children and preadolescents (i.e., from about age 10) (Olweus, 2010; Thomas et al., 2015).

3.8.2 Adolescent Peer Relations Instrument: Bully/Target (APRI-BT). As discussed previously, choosing an appropriate technique to measure bullying depends on the aims and questions of the research study. Since the current study aimed at investigating bullying from the preadolescent's subjective perspective, a self-report measure was suitable. In addition, Olweus (2013) reports that techniques such as peer nominations mostly identify the frequency of nominations of "extreme learners" as opposed to the frequency of the actual behaviour (i.e., bullying perpetration or victimisation). Thus, instead of detecting learners according to the frequency of bullying, peer nominations are better suited for identifying groups of perpetrators or victims who are severely affected. Therefore, peer nomination data would not be appropriate for comparing mean levels of bullying across groups. As one of the objectives of the current research study was to determine the mean level differences in bullying between gender and ethnic groups, a self-report was deemed appropriate.

In an EBSCOhost search conducted on 20 June 2013, no bullying measure specifically developed for the South African context could be found. Therefore, a measure from Australia had to be utilised for the current study. Although numerous self-reports were available (e.g., Peterson & Rigby, 1999; Salmivalli et al., 1996; Solberg & Olweus, 2003), various factors needed to be considered before deciding on a specific measure. For the current research study, the APRI-BT (Parada, 2000), a measure utilising a behavioural-based, dimensional approach, was deemed most appropriate, for several reasons. Firstly, the APRI-BT is an empirically supported measure that measures different types of bullying perpetration and victimisation

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

(i.e., physical, verbal, and social-relational), a feature that aligns with the aim of the current research study to assess various forms of bullying. Furthermore, the APRI-BT measures social-relational bullying, which is consistent with the developmental period of the research participants. As children's social-cognitive abilities improve with age, it would be important to assess behaviour that is characteristic of the developmental period of the participants (Casper et al., 2015); in this case, covert forms of bullying.

It is also important to consider the cognitive abilities of the participants that will complete the questionnaire (Furlong, Sharkey, Felix, Tanigawa, & Green, 2010). Thus, for example, it should be ensured that the reading level of the items is appropriate. As the APRI-BT has been validated for use in upper primary school learners (Finger, Yeung, Craven, Parada, & Newey, 2008), it was considered appropriate for use in the current research study, although a few terms had to be changed to suit a South African context better (see the chapter on methodology).

Furthermore, it is necessary to include the period in an instrument, so that participants are clear on which incidents of bullying to include in their reports (Griffin & Gross, 2004). However, the period used could affect the reliability of the responses: The more learners need to rely on their long-term memories, the more inaccurate the results could become (Furlong et al., 2010). Thus, it is recommended that participants report more recent, rather than distant behaviour. For the APRI-BT, learners were instructed to report behaviour that had occurred during the past school term.

Finally, the current study also set out to investigate cyberbullying. As strong evidence exists that cyberbullying items can be integrated into existing bullying measures (Thomas et al., 2015), the current research study made use of questions that had been obtained from the author of the APRI-BT and incorporated with the original questionnaire.

3.9 Chapter Summary

Although bullying has been around for centuries, the phenomenon of bullying has been empirically studied only from the 1970s (with the pioneering work of Olweus). Since then, numerous researchers from across the globe have displayed interest in and subsequently researched this ever-growing topic. Given the many conceptual and measurement difficulties, however, no single definition of bullying can account for the array of existing bullying acts and relationships. Although controversy surrounds each definitional element, most researchers

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

have come to accept the definition originally provided by Olweus, namely that the core defining criteria for bullying include an intention to do harm, repetition, and a power imbalance between the bully and victim. Additional definitional components such as whether the bullying act was provoked or not, as well as the presence and intensity of victim distress are even more disputed. With regard to cyberbullying, many researchers simply apply the definition of traditional bullying to the cyber context. However, cyber-specific criteria such as anonymity and publicity challenge the meanings and relative importance of the core components that make up the definition of traditional bullying. Nevertheless, the current study conceptualises bullying and cyberbullying as repeated, intentional acts of direct or indirect aggression against another learner (or group of learners) who the perpetrator perceives to be an easy target.

Traditional bullying can be classified broadly into direct and indirect behaviour, which respectively includes physical and verbal, as well as social-relational forms of bullying. On the other hand, cyberbullying has been more challenging to conceptualise and categorise, with classification methods involving direct and indirect bullying, the form of media and electronic medium used, and the specific type of behaviour or content used to bully others. In addition to debates regarding how best to define traditional bullying and cyberbullying (together with how to conceptualise their subtypes), uncertainty still exists with regard to the degree of overlap between traditional bullying and cyberbullying. Whereas some researchers regard cyberbullying simply as an extension of traditional bullying, others view these two forms of bullying as completely separate phenomena. Yet again, a third standpoint holds that acts of traditional bullying and cyberbullying are only partially overlapping phenomena. Literature has identified numerous unique and shared risk factors for each bullying (and cyberbullying) category. Thus, no single factor exists that causes a child to participate in a certain type of bullying, but rather multiple factors (at various levels) interact to determine the final behavioural outcome. However, less research has examined the unique and shared risk factors of specific types of bullying (i.e., physical, verbal, and social-relational). Identifying such risk factors is paramount in designing anti-bullying initiatives for specific forms of bullying.

Currently, several factors are creating difficulties in comparing the prevalence rates reported by different studies for bullying and cyberbullying, including the use of different definitions, the inclusion of the term “bullying”, differences in sample characteristics, measurement techniques, and instruments, as well as the time frame used for reporting bullying. Alternatively, these prevalence rates may be a reflection of true differences between

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

countries, affected by the specific culture, or perhaps the intensity of anti-bullying intervention efforts that have been implemented. Despite the vast differences in prevalence findings, international and South African studies consistently demonstrate that the majority of learners (regardless of age) are not involved in any kind of bullying, and that learners who are involved in such behaviour are mostly victimised. Whereas most studies report that the bully-victim category contains the smallest number of learners, others found that the perpetrator group in fact consists of the smallest number of learners. International and South African researchers also report that there is a higher prevalence of traditional forms of bullying, in comparison to cyberbullying. Regardless of the relatively small number of learners involved in cyberbullying and the fact that there appears to be an overall decreasing trend for bullying, traditional bullying and cyberbullying are still considered to be fairly common and serious events in the lives of all school learners.

In terms of demographic factors, it would appear that a curvilinear relationship exists between traditional bullying perpetration and age, in that the number of bullying acts increase and peak during early adolescence, whereafter it decreases. However, the exact age at which this decline occurs is still debatable. On the other hand, traditional bullying victimisation mostly follows a gradual pattern of decline as children progress from childhood to adolescence. With regard to involvement in cyberbullying, studies are still producing contradictory results for both cyberbullying perpetration and victimisation. Whereas no clear gender pattern emerges for bullying victimisation, gender trends in bullying perpetration appear to be relatively consistent across international and South African studies. This trend refers to boys being more involved in bullying as either bullies or bully-victims (especially direct bullying). On the other hand, girls may be as likely, or even more likely to engage in social-relational forms of bullying compared to boys. In contrast to traditional bullying, findings reported in literature on cyberbullying reveal no consistent gender differences for cyberbullying perpetration or victimisation. Similarly, information in literature on the role of ethnicity in traditional bullying and cyberbullying is inconsistent, with ethnic differences being attributed to a specific gender or form of bullying. Therefore, it is important to study not only the main effects of gender and ethnicity, but also their interaction.

Irrespective of role or domain, the developmental outcomes of involvement in bullying are associated with an array of psychosocial, behavioural, and school-related problems on individual and contextual levels. Whereas bullying perpetration is most often linked to externalising problems, victimisation often leads to internalising problems. Furthermore, it

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

would appear as though the bully-victim category often presents with the most severe psychosocial problems, yielding both perpetrator-like and victim-like profiles.

Although various methods exist for measuring bullying, self-reports appear to remain the most frequently utilised technique. Self-reports can assess bullying either from a definition-based or behaviour-based approach, each with its strengths and limitations. Further disagreement exists with regard to whether bullying should be marked by a cut-off score to produce categories (i.e., bully, victim, bully-victim, and non-involved), or whether it should be assessed as continuous variables. The latter approach has the benefit of labelling learners' behaviour, instead of the learners. After careful consideration, it was decided that the APRI-BT was the measure most applicable for use in the current research study. The next chapter focuses on the role of perceived parenting dimensions in traditional bullying and cyberbullying.

Chapter 4: Perceived Parenting Dimensions

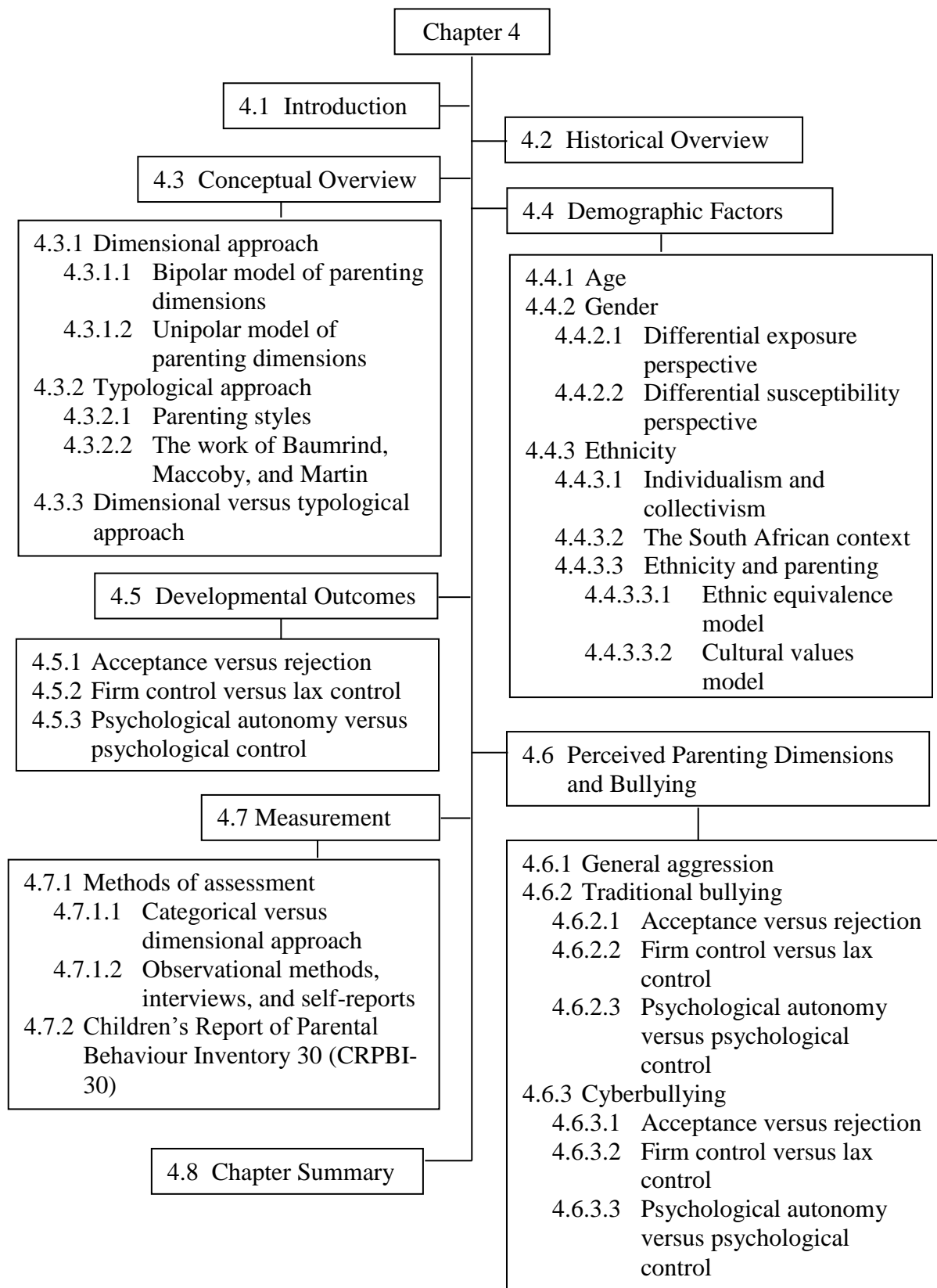


Figure 6. Outline of Chapter 4.

4.1 Introduction

One of the most studied variables in child and adolescent development is parenting. Parenting refers to caregivers' attempts to control and socialise their children, comprising a broad array of behaviour and attitudes aimed at meeting the physical, cognitive, and socio-emotional needs of children (Baumrind, 1967). In short, parenting serves as the mechanism through which children learn to distinguish appropriate from inappropriate behaviour, acquire socio-emotional skills, and learn about interactional patterns and societal conventions, all of which they transfer to other contexts such as the school (Jabaghourian, Sorkhabi, Quach, & Strage, 2014).

In this chapter, parenting is discussed in depth. First, a historical and conceptual overview is provided on how the conceptualisation of parenting behaviour has changed over the years, with specific emphasis on the development of and the distinction between perceived parenting dimensions (i.e., acceptance, firm control, and psychological control) and parenting styles. Thereafter, attention is given to how parenting differs across different ages, gender, and ethnic groups; followed by how parenting is related to child and adolescent developmental outcomes, aggressive behaviour, and bullying (including cyberbullying). The chapter concludes with a discussion of the different measurement approaches to parenting. Figure 6 provides a visual display of the outline of the chapter.

4.2 Historical Overview

Initially, researchers (e.g., Aldrich, 1947) emphasised the importance of early parenting practices (e.g., infant feeding methods and discipline techniques) in child development and in the formation of adult personality. However, these early parenting practices failed to predict specific child social and emotional developmental outcomes consistently—most likely because individual parenting behaviour is part of a milieu of many other parental behaviours and attitudes (Darling & Steinberg, 1993; Orlansky, 1949). Thus, the effects of individual parenting practices on child developmental outcomes remained elusive. Therefore, researchers (e.g., Baumrind, 1966; Schaefer, 1965a, 1965b) started focusing instead on differences in general parenting approaches (i.e., *how* parents engage in specific behaviours). Instead of emphasising the specific practices or techniques parents employ (i.e., *what* parents do), researchers rather highlighted the dimensions underlying general parenting approaches and the parenting styles that resulted from different combinations of these dimensions. Two

approaches emerged in studying parenting: one that focused on investigating the effects of individual parenting dimensions (a dimensional or variable-centred approach) and one that considered all dimensions simultaneously, thereby examining how different combinations of parenting dimensions interact to predict various child and adolescent developmental outcomes (a parenting styles, typological, or person-centred approach) (Power, 2013).

4.3 Conceptual Overview

4.3.1 Dimensional approach. Parenting dimensions can be defined as the “features, qualities, the descriptive scheme used to capture the nature of parenting” (Skinner, Johnson, & Snyder, 2005, p. 184). In other words, a dimension is a concept (relevant across ages and situations) used to characterise parenting behaviour that lies on a continuum where parents can be either high or low (Hoeve et al., 2009). Two viewpoints have emerged on how parenting dimensions should be conceptualised, namely the bipolar and unipolar models. These models are discussed respectively in the sections to follow.

4.3.1.1 Bipolar model of parenting dimensions. A myriad of terms used to describe various parenting dimensions are found in literature (Grolnick, 2003; Skinner et al., 2005). It is often difficult to determine the meaning of the parenting dimension from its label, and uncertainty exists whether the same term is conceptualised differently by different researchers. These dilemmas are evident in the numerous studies that have been conducted over the years. For example, in 1939, Symonds (in Spera, 2005) initially referred to parenting dimensions as acceptance versus rejection, and dominance versus submission, whereas Baldwin (1948) identified similar constructs as emotional warmth versus hostility, and detachment versus involvement. Schaefer (1959) again named these constructs love versus hostility, and autonomy versus control. Regardless of this array of terminology, it would appear that two major dimensions constantly emerge from various measures assessing parental behaviours, namely parental support or responsiveness, and parental control or demandingness (Maccoby & Martin, 1983; Skinner et al., 2005).

The supportive dimension, also known as warmth, responsiveness, or acceptance consists of an array of affective and nurturing parental behaviours, all of which reflect the extent to which parents respond to a child’s needs in an accepting, sensitive, and caring manner (Barber, Stolz, Olsen, Collins, & Burchinal, 2005; Schaefer, 1965b; Skinner et al., 2005). Thus, it entails all the behaviours (i.e., physical, verbal, or symbolic) that parents either

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

use or are perceived to use to express the affectional quality of the relationship (Rohner, 2004). Seen in nearly every conceptualisation of parenting, parental support serves as the foundation for caregiving, as it satisfies a child's need for feeling accepted, thus making this dimension one of the most essential features in the normal development of children (Bean, Barber, & Crane, 2006; Elstad & Stefansen, 2014; Skinner et al., 2005).

In comparison to support, the concept of parental control (including its role in child development) appears to be more complex and unclear, possibly because research on the topic has produced a plethora of different conceptualisations and operationalisations (Bean et al., 2006; Grolnick & Pomerantz, 2009; Soenens & Vansteenkiste, 2010). This is already evident by simply considering all the different labels that the concept of control has been given, including discipline, protectiveness, punishment, structure, firm versus lax control, forceful control, power assertion, possessiveness, strictness, behavioural control, psychological control, intrusiveness, and authoritative and authoritarian control (Grolnick & Pomerantz, 2009; Skinner et al., 2005). In addition to the countless labels, control may also hold different meanings that have been used interchangeably in definitions and measures assessing control. Control may refer to being “in control”, the degree to which parents attempt to structure the child's behaviour, for example, by presenting the child with clear expectations, setting age-appropriate limits, enforcing these regulations consistently, and holding parental knowledge regarding the whereabouts, activities, and friends of their child (Soenens & Vansteenkiste, 2010). Commonly referred to as structure versus chaos (Skinner et al., 2005), behavioural control (Barber, 1996), or structure (Grolnick & Pomerantz, 2009), parental control in this context refers to the extent to which parents provide their child with a predictable and organised environment (Power, 2013; Schaefer, 1965b; Schludermann & Schludermann, 1970). In other words, this form of parental control aims to provide children with consistent guidelines, as well as clear consequences for and feedback concerning their actions (Grolnick & Pomerantz, 2009). However, parental control may also refer to being “controlling” in that parents may push their children to act in particular ways without having obtained the child's input (Soenens & Vansteenkiste, 2010). Also referred to as autonomy support versus coercion (Skinner et al., 2005), psychological control (Barber, 1996), or control (Grolnick & Pomerantz, 2009), this dimension furthermore describes parenting that is intrusive, coercive, or pressuring to control a child's thoughts, feelings, and behaviour (Soenens & Vansteenkiste, 2010). Thus, this form of control reflects parental attempts to keep a child emotionally dependent on the parent by impeding the psychological and emotional development of the

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

child. This distinction between multiple forms of control (originally put forth by Schaefer, 1965b) is important, as they are associated differently with child and adolescent developmental outcomes. For example, whereas low levels of behavioural control generally have been associated with child and adolescent externalising problem behaviour, high levels of psychological control are linked to both externalising and internalising problems (Di Maggio & Zappulla, 2014; Hoskins, 2014; Janssens et al., 2015).

Owing to the focus on typological approaches to parenting (e.g., Baumrind, 1966; Maccoby & Martin, 1983), the construct of psychological control was largely neglected in empirical research from the 1970s to the 1990s, until it was again emphasised by Steinberg (1990) and Barber (1996). Still, in comparison to behavioural control, psychological control has received less research attention, especially in diverse cultures (Bean et al., 2006). By distinguishing between the two forms of control, the question that remains is not with regard to the amount of control needed for optimum child functioning, but rather the areas of child development on which the control is focused (Barber, 1996). In fact, Steinberg (1990) underscored this distinction by emphasising the fact that these two forms of control can have opposite effects on a child: Whereas the one form of control is facilitating, the other has an inhibitive effect. While Schaefer (1965b) originally referred to these forms of control as firm control and psychological control respectively, Barber (1996) relabelled them as behavioural control and psychological control, arguing that these labels communicated the difference between behavioural and psychological control better, namely that parents are practising control over the child or adolescent's overt behaviour versus his or her inner psychological world, a distinction that was already apparent in Schaefer's original work (Barber et al., 2005). Therefore, the forms of parental control differ in terms of the domain over which parental control is exercised. As Barber's (1996) work is derived from that of Schaefer, the terms *firm control* and *behavioural control* are used interchangeably in the remainder of this chapter.

Thus, it would appear that the three core dimensions of parenting include parental warmth (support), structure (behavioural control), and control (psychological control) (Barber et al., 2005; Power, 2013; Skinner et al., 2005). Also known as acceptance versus rejection, firm control versus lax control, and psychological autonomy versus psychological control respectively, these three features of parenting were in fact the dimensions revealed from the factor analysis of Schaefer's Children's Report of Parental Behaviour Inventory (CRPBI) over four decades ago (Schaefer, 1965b; Schludermann & Schludermann, 1970, 1988). These

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

parenting dimensions were regarded as bipolar in that parents who were high on one parenting feature would be low on its polar opposite at the same time (e.g., parents who scored high on the acceptance dimension would simultaneously be regarded as low in rejection). Schaefer's perspective on parenting and the measure he developed are discussed in more detail in the section on measurement (Section 4.7.2). The core parenting dimensions, together with how various researchers have labelled them, are summarised in Table 3.

Table 3

Summary of the Core Parenting Dimensions

Parenting Dimensions		
Support/Responsiveness	Acceptance versus rejection (Schaefer, 1965b; Schludermann & Schludermann, 1970)	
	Support (Barber et al., 2005)	
Control	Parental behaviour that is in control	Parental behaviour that is controlling
	Firm control versus lax control (Schaefer, 1965b; Schludermann & Schludermann, 1970)	Psychological autonomy versus psychological control (Schaefer, 1965b; Schludermann & Schludermann, 1970)
	Behavioural control (Barber et al., 2005)	Psychological control (Barber et al., 2005)
	Structure (Grolnick & Pomerantz, 2009)	Control (Grolnick & Pomerantz, 2009)

4.3.1.2 Unipolar model of parenting dimensions. In contrast to the bipolar view of parenting dimensions, Skinner et al. (2005) found that models of unipolar parenting dimensions provided a significantly better fit than models of bipolar parenting dimensions. In other words, instead of merely representing the opposite poles of three dimensions, each of the core features of parenting (i.e., warmth, rejection, structure, chaos, autonomy support, and coercion) represents its own dimension. Thus, parents who are high in one dimension (e.g., firm control) are not necessarily low in its conceptual opposite (e.g., lax control). Such reasoning is advocated further by Barber et al. (2005), who state that there is in fact a low correlation between psychological control and psychological autonomy and that these two

factors can occur relatively independently from each other. If psychological autonomy is low or absent, it does not necessarily mean that psychological control is present. Rather, the parent might be low in both poles and thus be described as uninvolved. Therefore, such an approach to assessment could provide a more comprehensive view of parenting. However, these conclusions would require replications, as limited studies (e.g., Sarıtaş, Grusec, & Gençöz, 2013; Skinner et al., 2005) have measured the parenting dimensions separately. Moreover, these studies have included only a small number of items for some of the parenting dimensions (e.g., structure and autonomy support were marked by only two items) (Barber et al., 2005; Skinner et al., 2005).

4.3.2 Typological approach

4.3.2.1 Parenting styles. Besides a dimensional perspective, the study of parenting can also be approached from a typological point of view. According to Darling and Steinberg (1993), parenting styles are configurations of parental attitudes held toward the child (across a wide range of parent-child interactions), creating the emotional climate or context in which socialisation occurs. This socialisation process includes parenting practices—specific behaviour aimed at achieving certain socialisation goals—as well as non-goal-directed parental behaviour (e.g., gestures, tone of voice, and body language). In fact, Darling and Steinberg (1993) propose that the effects of specific parenting practices will depend on the context in which they occur, thus stating that parenting styles have an indirect effect on child developmental outcomes. This moderating effect of parenting style on the relationship between parenting behaviour and adolescent outcomes has also been confirmed by other researchers (e.g., Wen & Hui, 2012).

4.3.2.2 The work of Baumrind, Maccoby, and Martin. One of the best-known and most influential typological approaches to parenting is based on work by Baumrind (1966, 1967), who conducted multiple studies on the behavioural patterns of preschool children, consequently identifying three parenting styles: the authoritative, authoritarian, and permissive parenting styles. Instead of defining these parenting styles in terms of linear combinations of multiple parenting dimensions, Baumrind (1966) articulated and enlarged only one parenting dimension, namely that of parental control or authority. She utilised a configurational approach to parenting, stating that the influence of any aspect of parenting is determined by the configuration of all other parenting aspects. Initially, it was believed that parenting styles differed only in terms of the type of parental control or authority employed,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

thereby still allowing (albeit conceptually) parents of different styles to be similar in their levels of warmth or support (Baumrind, 1966). However, it was soon discovered that, empirically, authoritarian and permissive parents did in fact differ from authoritative parents in terms of being relatively detached, utilising ineffective communication skills, and holding lower maturity demands (Baumrind, 1967). Such findings provided the motivation to reconsider orthogonal dimensions of parenting, as had been done by previous researchers.

In a subsequent attempt to combine Baumrind's configurational approach with these earlier efforts that defined parenting along various dimensions, Maccoby and Martin (1983) described parenting style as a function (or aggregation) of two dimensions; namely parental responsiveness and demandingness. Individuals would be categorised into different parenting style groups based on whether they scored above or below the medians (or another arbitrary cut-off point) on these two parenting dimensions. Thus, the respective parenting style categories would consist of different combinations of "high" and "low" scores on responsiveness and demandingness. Because of defining configurations based on orthogonal dimensions, it became possible to disentangle the processes underlying the influence of each parenting style (Darling & Steinberg, 1993). Therefore, based on the work of Baumrind and elaborated by Maccoby and Martin, four different parenting styles emerged, namely the authoritative, authoritarian, indulgent, and neglecting parenting styles.

Authoritative parents score high on responsiveness and demandingness (Maccoby & Martin, 1983), suggesting that these parents are warm and supportive, while holding high maturity demands for their children (i.e., expect their children to achieve). These maturity demands are fostered through bidirectional communication and encouragement of independence (Baumrind, 1967). Even though these parents hold clear standards for their child's conduct, their disciplinary methods are not intended to be punitive, but rather supportive.

Although authoritarian parents also hold high maturity demands for their children, these are communicated through rules for which no explanation is provided. As they are obedience- and status-orientated, these parents will assert power if their children misbehave (Baumrind, 1966). According to Maccoby and Martin (1983), these parents would thus score high on measures of maturity demands and control, but low on responsiveness and warmth.

Baumrind (1966) originally defined permissive parents as non-directive and lenient (i.e., possessing low maturity demands and being tolerant of any misbehaviour), whilst exhibiting moderate levels of responsiveness. That is, whereas some permissive parents are highly responsive to their children's needs, others demonstrate low levels of responsiveness. In an attempt to define this pattern of parenting more narrowly, Maccoby and Martin (1983)—later confirmed by other researchers such as Lamborn, Mounts, Steinberg, and Dornbusch (1991)—decided to split the permissive parenting style into indulgent parenting (i.e., high responsiveness and low demandingness) and neglecting or uninvolved parenting (i.e., low in both responsiveness and demandingness). Although these two styles of parenting are similar in terms of their low levels of control and maturity demands, neglecting parents differ in that they also score low on measures of parental responsiveness. By transforming Baumrind's tripartite model of parenting into a quadripartite model based on different combinations of the two orthogonal dimensions of parenting, Maccoby and Martin (1983) were able to describe a broader range of parenting styles.

4.3.3 Dimensional versus typological approach. Whereas the dimensional approach assesses the relations between different parenting dimensions and child outcomes, the typological approach instead focuses on the general emotional climate of parenting, in which dimensions are measured only to reflect the overall parenting environment (Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). To achieve the outcomes of the dimensional approach, assessment can be done either by examining the relations between individual parenting dimensions and child outcomes (bivariate correlations), or by simultaneously assessing the influence of multiple dimensions on child adjustment (multiple regression) (Power, 2013). Both the dimensional and typological approaches have their own advantages and disadvantages. Thus, the decision to use one approach over the other should be made on theoretical grounds. Factors such as the purpose of the research and the number of parenting dimensions assessed should be considered when making such a decision (Power, 2013; Steinberg et al., 1994).

As the dimensional approach makes use of continuous parenting variables, it has the advantage for researchers to use all of the existing data (Power, 2013). In addition, this approach allows researchers to understand the unique influence of individual parenting dimensions on child outcomes, independent of all other parenting factors. As numerous studies (e.g., Galambos, Barker, & Almeida, 2003; Hovee et al., 2009; Hoskins, 2014) found that parenting dimensions demonstrated distinct associations with adolescent adjustment,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

examining these core dimensions of parenting as independent predictors of adolescent adjustment would be deemed relevant. Alternatively, the dimensions could be studied together, but as separate factors. This would allow researchers to determine the individual effect of each parenting dimension, but still in the context of the other parenting factors (Bean et al., 2006). Such knowledge will allow researchers to discern the parenting variables that would increase the risk of child problem behaviour and those that would decrease the risk, which becomes imperative when developing prevention and intervention programmes (Lereya et al., 2013). This is in contrast to the typological approach, in which it is not possible to determine whether it is the perception of parental warmth, control, or perhaps an interaction between these dimensions that is mostly responsible for child outcomes (Kim & Rohner, 2002). The dimensional approach also provides researchers with the opportunity to examine the extent to which various parenting dimensions have similar (or diverse) effects in different cultures, thus gaining a deeper understanding of the dynamics of parenting behaviour in cultural contexts. However, because all three parenting dimensions are related significantly and can co-vary (Elstad & Stefansen, 2014), investigating one parenting dimension as separate from the others creates the risk that the effects portrayed by that particular dimension can be either overstated or misinterpreted (Bean et al., 2006). Furthermore, as the functioning of any system (including the family) is determined by the interactions of its parts (i.e., parenting dimensions), isolating each dimension undermines the multidimensional and interactional nature of human behaviour (Mandara, 2003).

The typological approach instead views the effects of parenting in a more holistic manner; examining how different combinations of parenting dimensions would influence child outcomes (i.e., interaction effects). Thus, parenting dimensions would not be studied in isolation, but rather in the context of all other dimensions (Mandara, 2003). This is based on the idea that the meanings and consequential effects of behaviour expressed in one parenting dimension would depend on the climate created by the other dimensions (Kerr, Stattin, & Özdemir, 2012). Thus, the belief that the family is a system made up of various parenting behaviours whose joint effects are different from the sum of their individual effects is underscored (Mandara, 2003). Such combinations of parenting variables are also believed to be more influential in child development than their unique effects (Aunola & Nurmi, 2005).

As with the discussion on whether learners should be categorised as bullies or victims (Section 3.8.1.2), the limitation of the typological approach lies in deciding where to draw the boundaries between different parenting groups. As there are no definite or standard cut-off

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

points, it would mean that the distinction between parenting groups is based on some relative criterion such as the median, resulting in different cut-off points in different populations (Wen & Hui, 2012). Consequently, categorising parents into different parenting style groups becomes an arbitrary process, especially for those who fall just above or below the group cut-off points. In addition, when these continuous parenting dimensions are split into categories of high and low, a large amount of statistical information is lost. In other words, a significant percentage of the research participants possibly could be excluded from the study, as they do not belong to any of Baumrind's "pure" parenting style categories, which raises concerns about whether the parenting processes under investigation are representative (Bean et al., 2006). Furthermore, Power (2013) states that if there are many parenting groups with only a few individuals in each group, there could be a lack of statistical power. The final drawback concerns the cultural relevance of the typological approach: Some studies have found that firstly, only a small percentage of their non-Western (i.e., non-white) sample of parents could fit into any of Baumrind's parenting categories (e.g., Kim & Rohner, 2002). Secondly, parenting styles were associated inconsistently with child outcomes in non-European cultures (Bean et al., 2006). The strengths and limitations of each approach to parenting are summarised in Table 4.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 4

Summary of the Strengths and Limitations of the Two Approaches to Parenting

Approach	Strengths	Limitations
Dimensional (variable-centred)	<p>Uses all existing data</p> <p>Determines the unique effect of each parenting dimension on child outcomes (if dimensions are studied separately)</p> <p>Determines the relative effect of each parenting dimension on child outcomes (if dimensions are studied simultaneously, but as separate factors)</p> <p>Allows for a deeper understanding of parenting behaviour in diverse cultures</p>	<p>Effects portrayed by a specific parenting dimension can be overstated or misinterpreted</p> <p>Undermines the multidimensional and interactional nature of human behaviour</p>
Typological (person-centred)	<p>Holistic view of parenting effects (i.e., meanings and behaviour expressed in one parenting dimension would depend on the climate created by the other dimensions)</p>	<p>Categorising parents into groups is an arbitrary process</p> <p>Large amounts of statistical information is lost</p> <p>Difficult to determine which parenting dimension is mostly responsible for child outcomes</p> <p>Cultural relevance questioned</p>

Despite the many differences between the typological and dimensional approaches to parenting, both of them share the common goal of identifying the most important components of parenting and how these influence child development in turn (Elstad & Stefansen, 2014). Hence, these approaches should not be viewed as completely opposing one another, but rather as compatible. As discussed, the decision to use one approach over the other should be made on theoretical grounds based on the purpose of the research and the number of parenting dimensions to be assessed (Power, 2013; Steinberg et al., 1994). One of the purposes of the current study was to gain insight into the specific contributions made by individual parenting dimensions to bullying perpetration and victimisation across gender and ethnic groups—an under-researched topic in South Africa. Furthermore, this study would include only a limited

number of dimensions. Therefore, it was decided that a bipolar dimensional approach to parenting should be utilised in the current study. More specifically, this study made use of the theoretical perspective adopted by Schaefer, utilising a shortened version of his inventory (i.e., CRPBI-30) to measure perceived parenting dimensions. This inventory, as well as the reasons for its inclusion in the research study, is discussed in the section on measurement (Section 4.7.2).

Several factors have been shown to influence the nature of parenting, including socioeconomic status, income level, ethnicity, and gender of parents and adolescents (Masud, Thurasamy, & Ahmad, 2015). Some of these demographic influences (i.e., age, gender, and ethnicity) are discussed in the sections below.

4.4 Demographic Factors

4.4.1 Age. Parenting can be regarded as a process in which either one party influences the behaviour of the other (unidirectional process) or both parties influence each other (interactional process) (Kerr et al., 2012). According to the unidirectional perspective, parenting behaviour or styles are regarded as characteristics of the parent affecting child and adolescent development (parent effects). Alternatively, a child's behaviour can affect the parent's use of a certain behaviour or style, resulting in a change in parenting over time (child effects) (Albrecht, Galambos, & Jansson, 2007). In contrast, an interactional or transactional interpretation states that parenting behaviour influences the child's behaviour, which in turn changes the parent's behaviour, and so forth (Kerr et al., 2012).

Although a unidirectional, parent-effects model has always been the accepted assumption (even in literature on bullying) (Darling & Steinberg, 1993), evidence has begun to emerge that claims that the child-effects (e.g., Fletcher & Johnston, 2016; Kerr et al., 2012; Ma & Bellmore, 2012) or interactional models (Georgiou & Fanti, 2010) are in fact dominant. Therefore, some researchers have asserted that perhaps the nature of the parent-child relationship changes over time; in that during childhood, parent-to-child effects are dominant, but that child-to-parent or interactional effects become stronger during adolescence (Ma & Bellmore, 2012). This would imply that during the period of preadolescence—in which there is a gradual shift from unilateral parental authority towards equal power relations between parents and children—there should also be a change from predominantly a parent-effects model towards child-effects or interactional processes (Ma & Bellmore, 2012). In fact, it has

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

been suggested that, owing to physical and social changes during certain developmental transitions (e.g., transition to formal schooling at age six and transition to adolescence from ages 11 and 12), stress levels of children and family would increase. Consequently, both parent and child effects would be more dominant during these transition periods (Gross, Shaw, & Moilanen, 2008). In support of such an interactional model, Georgiou and Fanti (2010) demonstrated that parental monitoring and child bullying perpetration reciprocally influenced each other as children progressed from Grade 1 (age 7) to Grade 6 (age 12). Similarly, Fanti and Georgiou (2012) made use of a preadolescent sample (Grades 5 and 6) and illustrated reciprocal relations between positive parenting and bullying perpetration over a two-year period. Even if no transactional effects are observed between parents and children, some authors (e.g., Shaffer, Lindhiem, Kolko, & Trentacosta, 2013) caution against using such findings to claim that parenting interventions are unnecessary. It is still reasonable to assume that child behaviour is maintained by stable or unstable parenting actions.

Across all developmental periods however, inconsistencies still exist regarding the direction of effects, possibly due to different parenting and child constructs being studied, the cross-sectional nature of most studies, and because studies utilising longitudinal designs only examined parent effects (Albrecht et al., 2007). For example, Lansford et al. (2011) found that although there was evidence of transactional effects between parents' use of physical punishment and externalising behaviour in children (ages 6 – 9), parent effects were stronger in their sample of preadolescents and adolescents (ages 10 – 15). However, Fletcher and Johnston (2016) found that child effects, as opposed to parent effects, were already evident in middle childhood. These effects were found only in boys, however, suggesting that child gender may exert an influence on the direction of effects. In contrast, Kuppens, Grietens, Onghena, and Michiels (2009b) demonstrated that the direction of effects was in fact dependent on parent gender: Whereas mother-child dyads were best represented by transactional effects, parent effects were evident in father-child dyads. Another argument was put forth by Lansford et al. (2011), who pointed out that the starting age of a specific study may not be the starting point of the developmental progressions. Thus, the ability of studies to identify parent, child, or interactional effects may depend on the developmental point at which analyses began and ended. In other words, just because a study found that child effects were dominant at the age at which the analyses began, it does not necessarily imply that parent effects were not operating in the preceding developmental period that may have contributed to the levels of child behaviour at the starting point of the study.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Regardless of this possible shift from parent- to child-effects models, parenting still proves to serve as an important influence on developmental outcomes (especially in preadolescence); although specific parenting dimensions may vary in their relative contribution to outcomes across age groups (Fagan, Van Horn, Antaramian, & Hawkins, 2011). For example, the importance of perceived parental acceptance or support in preadolescence was illustrated by a study conducted by Stadler, Feifel, Rohrmann, Vermeiren, and Poustka (2010). These authors demonstrated that parental support might provide a stronger buffering effect against the risk of peer victimisation in preadolescents and early adolescents (ages 11 – 14) as compared to older adolescents (ages 15 – 18). Similarly, a meta-analysis conducted by Lereya et al. (2013) found that although perceived parental warmth protected both preadolescents and adolescents against peer victimisation, its effect was more pronounced during preadolescence. Other factors (e.g., school support and peers) may provide older adolescents with support, whereas younger adolescents and preadolescents would benefit most from support from their parents. Similarly, a meta-analysis conducted by Hoeve et al. (2009) confirmed that the effects of general parenting (both support and control dimensions) on delinquency was stronger in childhood and preadolescence when compared to older adolescents. All of these studies confirm the importance of perceived parental acceptance in the period of preadolescence. Even in older samples, although peers increasingly influence adolescents' behaviour as they progress through adolescence and into early adulthood, parents still constitute the primary agents of socialisation (Kenney, Lac, Hummer, Grimaldi, & LaBrie, 2015). In some instances, parental influence may even override the influence of deviant peers (Galambos et al., 2003)

In considering the developmental needs of preadolescence, it can be assumed that the intensity and influence of parental control would more likely influence adjustment of individuals in this age group, compared to individuals in other developmental periods (e.g., early and middle childhood) (Hill, Bromell, Tyson, & Flint, 2007). As preadolescents and adolescents need sufficient space for psychological development and identity formation, overly strict parenting and high levels of parental psychological control may be more detrimental especially during these developmental periods than during childhood (Litovsky & Dusek, 1985; Reitz, Deković, & Meijer, 2006). However, preadolescents and adolescents also engage in fewer interactions with their parents and instead spend more time with their friends (Jiang, Huebner, & Hills, 2013). Thus, parental monitoring of an adolescent's activities is especially significant in this age group, as it can prevent the child from spending too much

time with deviant peers. In turn, this could possibly prevent the onset of, or reduce the frequency at which problem behaviour may occur (Hoskins, 2014). In other words, during the period of preadolescence, parental behavioural control remains an important factor as evidenced by the delicate balance parents need to achieve between appearing lax and uninvolved, and exerting too much control, as both extremes have been linked to poor developmental outcomes.

The studies discussed above all illustrate that parenting still has a significant influence on developmental outcomes during preadolescence, regardless of whether there might be a change in the direction of effects (Fletcher & Johnston, 2016). Wolfe and McIsaac (2011) further state that just because children might have been exposed to positive parenting at an earlier stage, it does not protect them against inappropriate parenting behaviour (e.g., low acceptance) during later stages. The effects of such inappropriate parenting are discussed in Section 4.5.

4.4.2 Gender. Gender differences in problem behaviour, including involvement in bullying, are evident in children and adolescents. For example, most studies found that boys of all ages are more involved in direct forms of bullying (e.g., physical) (e.g., Álvarez-García et al., 2015; Lapidot-Lefler & Dolev-Cohen, 2015; Sittichai & Smith, 2015), whereas girls may outnumber boys in terms of involvement in social-relational bullying (e.g., Arslan et al., 2012; Smith, Polenik, et al., 2012). Apart from a biological disposition, these gender differences may also result from parents treating their sons and daughters differently (from a differential exposure perspective), or because the effect of the same parenting behaviour on adolescent problem behaviour is different for sons and daughters (from a differential susceptibility perspective) (Barnett & Scaramella, 2013). As it will become clear from the discussion, however, consistent evidence for mean-level gender differences in adolescents' experience of various parenting behaviours or for the moderating role of gender is not available.

4.4.2.1 Differential exposure perspective. It has been suggested that parents treat boys and girls differently, especially when they enter the period of adolescence. By emphasising relationship-enhancing behaviour such as nurturance and family-orientated attitudes, female adolescents are socialised into caring for a future family. In contrast, physical strength and time spent outside of the home are considered important in male adolescents; in order for them to be able to function competently in the adult working world and provide for their

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

family (Windle et al., 2010). Consequently, various studies have confirmed that whereas girls are more exposed to parenting characterised by warmth, authoritativeness, and involvement, boys perceive their parents as more rejecting (Buschgens et al., 2010; Georgiou & Fanti, 2010; Jabeen, Anis-ul-Haque, & Riaz, 2013). With regard to control, several researchers found that girls perceive their parents as more demanding, controlling, or overprotective, which possibly reflects how parents monitor their daughters more closely than they monitor their sons (Di Maggio & Zappulla, 2014; Elstad & Stefansen, 2014; Yuwen & Chen, 2013). Even in a cyber context, girls reported that their parents demonstrated higher use of specific Internet practices (e.g., rules regarding the Internet and communication regarding the use of technology), which could also suggest parental overprotection towards girls specifically (Kokkinos et al., 2016). The fact that these gender differences in perceived parenting were stable across age groups further confirms that the adolescent socialisation process is dependent on gender (Fagan et al., 2011). However, several studies have reported opposite results, for instance girls perceiving parents as less accepting or overprotective, boys experiencing more parental restrictions, authoritarian parenting, and harsher discipline techniques in both offline and online contexts (Buschgens et al., 2010; Di Maggio & Zappulla, 2014; Eastin, Greenberg, & Hofschire, 2006; Jabeen et al., 2013). Still, some researchers have even found that no differences existed between the gender groups when it came to how they perceived their parents' behaviour (Elstad & Stefansen, 2014; Roche, Ahmed, & Blum, 2008; Stoltz et al., 2013).

In turn, gender expectations and differential treatment of adolescent boys and girls have created certain societal norms for aggressive behaviour (Crick & Zahn-Waxler, 2003). In other words, overt aggression (or even bullying) would be tolerated or reinforced more readily when occurring in boys, whereas it will be more acceptable for girls to express their anger in social-relational ways. Moreover, the fact that parents spend less time supervising their sons compared to their daughters may result in boys having more opportunities to become involved in problem behaviour (Fagan et al., 2011). As girls are exposed mostly to a type of parenting that emphasises relationship qualities (e.g., reasoning, warmth, and psychological autonomy), it would imply that if they were to attempt to achieve their social goals through aggression, they would utilise strategies that are familiar to them (i.e., relationship strategies such as social-relational bullying). In contrast, exposure to authoritarian parenting creates a context in which anger and physical punishment are the modelled qualities; thus causing boys to utilise

such strategies (i.e., physical bullying) to get what they want. Thus, gender differences in bullying simply may be because of socialising boys and girls differently.

4.4.2.2 Differential susceptibility perspective. As opposed to being treated differently, it is also possible that gender differences in adolescent bullying may result from one gender being more sensitive to, and therefore more influenced by parents' behaviour (Barnett & Scaramella, 2013). In other words, some dimensions of parenting may be more critical in determining the outcomes for a particular gender group. In contrast to the differential exposure perspective, researchers have only just begun to study how different parenting and adolescent characteristics interact to influence the risk for involvement in different types of bullying perpetration and victimisation (Bibou-Nakou et al., 2013; Boel-Studt & Renner, 2013).

In support of theories regarding gender differences in socialisation processes, several studies have found that parenting-related factors play a larger role with respect to aggressive or problem behaviour in girls, while different social or individual variables rather may account for boys' involvement in bullying (Gómez-Ortiz et al., 2016). Supporting such claims include studies that found that perceived parental support and psychological control explained a larger proportion of the variance in delinquency in girls than it did with regard to boys (Bean et al., 2006), perceived parental warmth was more prominent in promoting academic competence and reducing delinquent behaviour in girls than it did in boys (Wang, 2014), and perceived parental lax control resulted in higher relational aggression only in girls (Brown et al., 2007). Furthermore, in a meta-analysis conducted by Kawabata, Alink, Tseng, Van Ijzendoorn, and Crick (2011), it was found that paternal psychological control was related more strongly to girls' use of relational aggression than it was with regard to boys. As boys typically engage in aggression that is less relational, it could suggest that relational aggression may not be used frequently in father-son interactions; therefore, it is unlikely to serve as a model for developing relational aggression for boys. For girls, however, fathers may be more inclined to use psychological controlling techniques as opposed to physical punishment, thus providing a context in which girls learn to use relational aggression through observational learning or modelling (Stoltz et al., 2013). In the literature on bullying specifically, Boel-Studt and Renner (2013) found that although perceived parental monitoring positively correlated with psychological bullying victimisation for both boys and girls, only in girls this parenting dimension increased the risk for experiencing both physical and psychological bullying victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Therefore, as girls are often taught to attach greater importance to interpersonal (family) relationships, parenting behaviour may potentially have a stronger (risk or protective) effect on problem behaviour for girls than it may have for boys (Fagan et al., 2011). An alternative explanation for gender differences comes from literature often showing that same-sex parent-child relations (i.e., mother-daughter and father-son) are considered to be more important than cross-gender parent-child relations in determining adolescent outcomes, perhaps due to the inclination of adolescents to identify with the parent of the same sex (Hoeve et al., 2009). As mothers are usually the primary caregivers for their children (Raley & Bianchi, 2006), it would imply that adolescent girls spend more time around their same-sex parent than boys do, which in turn would mean that the parental (i.e., maternal) influence on girls' behaviour is much more pronounced than that for boys (Saritaş et al., 2013). Taken together, literature on gender differences infers that even if adolescent boys and girls receive similar parenting (i.e., acceptance or control), the influence of parent behaviour on adolescent outcomes will be different or even stronger for adolescent girls.

Other studies found that in both genders, parenting behaviour was equally important in influencing adolescent developmental outcomes only with regard to the type of parent dimension in which gender differences were evident. For example, results reported by Roche et al. (2008) revealed that while girls' problem behaviour (e.g., truancy and multiple sexual partners) were associated only with the relational dimension of family socialisation (i.e., parent support), boys' problem behaviour was influenced more strongly by the instrumental dimension of family socialisation (i.e., behavioural control). Furthermore, in a review conducted by Hilton et al. (2010), it was reported that when parents utilised harsh or authoritarian forms of parenting, it might place boys at risk for becoming perpetrators of bullying, whereas girls reacted by becoming anxious and withdrawn, thereby becoming vulnerable to victimisation. In contrast, most boys who were victimised (or became bully-victims) had parents who were perceived as overprotective. Such overprotected boys never develop the ability to part from their parents; therefore, they experience problems with autonomy, identity formation, and subsequent bullying victimisation (Hilton et al., 2010). A study conducted by Gómez-Ortiz et al. (2016) also illustrated how psychologically aggressive disciplinary techniques of parents led to bullying perpetration in boys, but physical punishment by parents led to bullying perpetration in girls. Thus, the effect of specific parenting behaviour would vary between adolescent genders. However, only with regard to

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

bullying victimisation, psychological disciplinary practices had the same effect in both sexes (Gómez-Ortiz et al., 2016).

The effect of parenting behaviour on adolescent adjustment may be explained by referring to the acceptability and frequency of utilising a disciplinary practice in a particular group. In a study conducted by Lansford et al. (2005), it was shown that the perception of physical discipline by parents as normative moderated the effect of this parenting behaviour on adolescent adjustment, in that physical discipline was more strongly related to poor adolescent adjustment in cultures where the use of physical punishment was considered less normative. Extending such arguments to the context of gender, the use of physical and psychological punishment by parents may be perceived by both parents and adolescents as being more acceptable among boys and girls respectively. Thus, the use of non-normative disciplinary techniques (i.e., physical punishment with girls and psychological aggression with boys) may have an even greater negative effect on adjustment (e.g., bullying perpetration) (Gómez-Ortiz et al., 2016).

Complicating the matter even further are studies showing how developmental and behavioural outcomes of boys (rather than those of girls) are more highly influenced by parenting variables (Bowes et al., 2010; Wang, 2014). Other studies instead verified that gender of children or adolescents did not moderate the influence of parenting behaviour on adjustment of children or adolescents (Cai et al., 2013; Pinquart, 2015), or on problematic behaviour, including internalising problems (Windle et al., 2010), aggression or delinquency (Kerr et al., 2012; Kuppens, Laurent, Heyvaert, & Onghena, 2013; Lansford et al., 2011), and all types of bullying perpetration and victimisation in either traditional or cyber contexts (Georgiou, 2008; Wang et al., 2009; Windle et al., 2010). In other words, perceived parenting dimensions are associated with bullying perpetration and victimisation in similar ways for both boys and girls, in that neither gender is more sensitive to the effects of a certain parenting behaviour than the other is. In fact, Rohner and Khaleque (2010) advocated the universal tendency for people to respond in the same way to perceived acceptance or rejection, regardless of factors such as gender differences. As both genders experience similar developmental needs during preadolescence (e.g., establishing autonomy), it would make sense that a particular parenting dimension (e.g., parental psychological control) is likely to have the same negative effect on bullying, regardless of gender (Batanova & Loukas, 2014). Such findings stand in contrast to the assumption that the types of aggressive behaviour considered normative for different genders are the result of parents' differential treatment of

boys and girls. Therefore, the differential treatment of boys and girls may be less pronounced than believed previously. According to Windle et al. (2010), such gender similarities in problem behaviour relationships between parents and children suggest that similar parenting programmes can be incorporated in anti-bullying programmes, regardless of the adolescent's gender.

Overall, these findings suggest that gender may moderate the influence of various parenting behaviours on the risk for being involved in bullying. Even so, studies focusing on how perceived parenting dimensions and gender interact to influence bullying come to rather inconsistent findings. Consequently, several researchers (e.g., Batanova & Loukas, 2014) have urged for more research to be conducted to better understand the role of gender in the relation between parenting behaviour and different types of bullying perpetration and victimisation. Next, attention is given to another potential demographic moderating variable, namely ethnicity.

4.4.3 Ethnicity. Apart from the influence of gender, it is postulated that ethnicity or culture may influence parenting behaviour and practices. Although the number of studies investigating ethnically diverse parenting behaviours has increased gradually over the years, many questions remain unanswered, such as how culture influences the expression, meaning, and effects of parenting behaviour (Liu & Guo, 2010).

4.4.3.1 Individualism and collectivism. One of the cultural values that has been found to influence parenting is the degree of individualism or collectivism in a given society or culture (Chao & Kanatsu, 2008; Darwish & Huber, 2003). Cultures that value individualism would focus on promoting a person's self-interests, in addition to personal autonomy or independence, individual decision making, and self-realisation. There would be less concern regarding the interests of others, with the exception of perhaps the person's immediate, nuclear family. In contrast, collectivistic cultures place value on loyalty to one's group, interdependence, knowing one's place in the group, and a belief that the decisions of the group are superior to individual decisions. Thus, concern about the needs and interests of others are highly emphasised (Darwish & Huber, 2003). Societies typically perceived as individualistic include modernised, Western countries (e.g., North America, Western Europe, and Australia), whereas Eastern, Middle Eastern, and African countries (e.g., China, India, Japan, and Pakistan) are often considered to be more collectivistic in nature. However, caution should be exercised in treating countries as if they were cultures, as many cultures can

be found within a single political border, each varying in its degree of individualism or collectivism (Vogt & Laher, 2009). This is especially relevant in a multicultural country such as South Africa.

4.4.3.2 *The South African context.* In the South African context specifically, several studies confirm that black African cultures are predominantly collectivistic (including the Sotho culture to which many of the participants in the current research study belong); whereas white Western cultures (including the Afrikaans culture to which many participants in the current research study belong) tend to be more individualistic (Eaton & Louw, 2000; McCrae, 2004). It is often argued that the collectivistic dimension of the African culture is best captured by the indigenous term *ubuntu*, a concept that is concerned with one's caring and compassionate relationships with others, emphasising connectedness among community members and a commitment to the common good (Vogt & Laher, 2009). The collective nature of the African culture can also be reflected in the living arrangements of a family: In the Sotho culture specifically, family members of various generations tend to reside in one compound (Obioha & T'soeunyane, 2012). Furthermore, it is expected that every family member ensures the continuity and stability of the family system, by placing the needs of the system above any individual's needs (Obioha & T'soeunyane, 2012). However, because of acculturation, there may be minimal or even no differences across various ethnic groups or cultures (Eaton & Louw, 2000; Vogt & Laher, 2009). In fact, Mpofu (1994) highlighted a modernity trend among African cultures, which represents a shift from a collectivistic to a more individualistic orientation to life. Supporting this shift include studies that found no significant differences between race or ethnicity (e.g., white and black) and the construct of individualism or collectivism (Van Dyk & De Kock, 2004; Vogt & Laher, 2009).

4.4.3.3 *Ethnicity and parenting.* It has often been suggested that ethnicity or culture plays an important role in determining how parents choose to interact with their children. Parents serve as the primary socialisation agents for their children, including assisting the child in identifying with and behaving in accordance with cultural norms. Thus, parents in different ethnic groups may adopt child-rearing behaviour or practices that are culture specific, to aid their children in developing culturally desirable traits and behaviour (Liu & Guo, 2010). For example, parents in individualistic cultures would adopt behaviour or styles that promote independence and self-reliance, whereas parents in collectivistic cultures would encourage children to be more cooperative and interdependent (Georgiou, Fousiani, Michaelides, & Stavrinides, 2013). Therefore, parents who score high on perceived

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

acceptance and psychological autonomy would provide children with opportunities to develop independence—a trait highly valued in individualistic societies (Liu & Guo, 2010). Thus, parenting that is lower in warmth and higher with regard to the control dimensions would appear unduly harsh to the Western culture. However, parents of a collectivistic background consider such types of parenting behaviour as fundamental in passing along cultural norms (Shapka & Law, 2013). In addition, Chao and Kanatsu (2008) found that, whereas white Western parents scored higher on parental acceptance, ethnic minority parents (e.g., Asian Americans, African Americans, and Latinos) scored higher on parental behavioural control. Thus, the type of child-rearing beliefs and practices employed by parents would often reflect the paradigms of autonomy or connectedness found in individualistic and collectivistic societies respectively, which in turn encourages the development of an independent or alternatively interdependent sense of self (Chao, 1995).

Although parenting dimensions have been associated with various child or adolescent outcomes, controversy exists with regard to whether these associations are similar across ethnic groups. To understand the role of ethnicity in the relation between parenting behaviour and adolescent outcomes, two main models have been used in literature: ethnic equivalence and cultural values models (Lamborn & Felbab, 2003).

4.4.3.3.1 Ethnic equivalence model. An ethnic equivalence model emphasises parental similarities across ethnic groups, thereby promoting a universalistic perspective of parenting that suggests that parenting behaviour is perceived similarly by and related to adolescent outcomes, regardless of culture (Lamborn & Felbab, 2003). Thus, parenting dimensions of acceptance, firm control, and low psychological control would universally address adolescents' needs for approval, structure, and autonomy respectively. In so doing, these parenting dimensions would influence adolescent behavioural outcomes positively in any ethnic group.

Consistent with an ethnic equivalence model, a meta-analysis conducted by Khaleque (2013) found that parental warmth or acceptance was beneficial to child adjustment, regardless of differences in ethnicity or geographical location. Similarly, several cross-cultural studies produced results that emphasised the key role of perceived parental warmth and acceptance in positive adolescent behavioural outcomes (Calafat, García, Juan, Becoña, & Fernández-Hermida, 2014; Hoskins, 2014; Kim & Rohner, 2002).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

In terms of perceived parental control, studies also demonstrated that ethnicity did not moderate the relationship between firm control and adolescent outcomes (Lansford et al., 2011), nor did the effects of psychological control differ across cultures (Cai et al., 2013; Soenens, Park, Vansteenkiste, & Mouratidis, 2012). In other words, whereas parents' psychological control attempts would result in maladaptive adjustment in all adolescents, behaviour promoting psychological autonomy alternatively resulted in positive adolescent behaviours (Soenens & Vansteenkiste, 2010). Such findings can be interpreted in the light of the universal developmental need for preadolescents to function autonomously; thus, the manipulating and pressuring behaviour characterising parental psychological control would have a negative effect for individuals in individualistic as well as collectivistic societies.

Few researchers have attempted to study whether the associations between perceived parenting dimensions and bullying vary across ethnic groups. The limited number of studies conducted indicate that higher perceived parental acceptance and firm control (conceptualised as parental monitoring) was related to lower rates of both direct and indirect victimisation across ethnic groups (Hokoda, Lu, & Angeles, 2006; Windle et al., 2010). Additionally, similar relations between perceived parental psychological control and bullying victimisation have been found in different cultures (Li et al., 2015).

4.4.3.3.2 Cultural values model. In contrast to the ethnic equivalence model, cultural values models emphasise how parent child-rearing practices often reflect the beliefs and values of a culture, causing the expression and perception of parenting behaviour to vary (Shapka & Law, 2013). Cultural values models highlight different value systems in cultural groups that would firstly influence the meaning or interpretation of parenting behaviour, and secondly the effects of such behaviour on adolescent outcome variables (Bean et al., 2006). Owing to different meanings, it can result in parents of different cultural backgrounds utilising diverse strategies in attempts to achieve positive, culturally desired socialisation goals with their children (Soenens & Vansteenkiste, 2010). In other words, cross-cultural differences in parenting dimensions and styles may be attributed to different (culturally based) goals for an adolescent's development, thus causing parents to adopt certain parenting behaviour to promote the outcomes they value. Such differences in parenting behaviour observed across cultural groups may partly explain why some ethnic groups are more involved in problem behaviour (e.g., bullying) as compared to others (Tippett et al., 2013).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Alternatively, parenting dimensions may be related to adolescent outcomes in different ways, in that dimensions that lead to adaptive (or maladaptive) outcomes in Western societies would result in maladaptive (or adaptive) consequences for non-Western adolescents (Lamborn & Felbab, 2003). In a case where a study produces mixed or even no findings related to any parenting dimension, a cultural values approach could be considered for better understanding (Bean et al., 2006). In essence, the cultural values model questions the cultural relevance of parenting dimensions and styles. Even studies conducted in South Africa recently have questioned the universality of Western parenting style theories (Grové & Naudé, 2016).

As opposed to parental acceptance, most of the cross-cultural variability in parenting seems to exist for the effects of perceived behavioural and psychological control on adolescent outcomes (Hoskins, 2014). Several studies support the finding that adolescents in cultures that are more collectivistic in nature experience higher levels of behavioural and psychological control (Chao & Aque, 2009; Yuwen & Chen, 2013). In terms of parent effects, the use of high levels of behavioural control or an authoritarian parenting style in societies with a collectivistic cultural orientation might teach children conformity and obedience, which not necessarily leads to negative adolescent outcomes (Chao & Aque, 2009; Di Maggio & Zappulla, 2014; Jabeen et al., 2013; Lansford et al., 2005). In a study conducted by Chao and Aque (2009), it was found that for white European Americans, parental behavioural control was beneficial only when adolescents experienced low to moderate levels of anger. Therefore, if white adolescents perceived their parents' behavioural strategies as negative, it might cause them to experience higher levels of anger, which in turn reduced the beneficial effects of behavioural control. Such patterns were not observed in Asian American adolescents, suggesting that even if adolescents from more collectivistic cultures experienced anger about their parents' behavioural strategies, they might still feel that this control was a necessary part of parenting or that it showed parental care (Chao & Aque, 2009). Thus, whereas adolescents from collectivistic cultures more readily accept their parents' use of firm control, adolescents from individualistic cultures may perceive this as indicative of parental rejection, which subsequently may lead to higher rates of adolescent maladjustment (Lansford et al., 2005).

With regard to psychological control, it was observed that in some non-Western (collective) cultures, this parenting dimension did not necessarily have a negative effect on child adjustment or behaviour (Chao & Aque, 2009; Nunes et al., 2013). Such findings stand in direct contrast to what has been found in Western cultures (e.g., Janssens et al., 2015),

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

which supports the claim that parenting dimensions such as control may be deemed acceptable for teaching children how to respect parental authority, or to achieve the highly valued collectivistic traits of compliance and interdependence. Further supporting cultural values models include findings that reveal weaker relations between granting psychological autonomy and academic achievement in ethnic minorities as compared to white adolescents (Pinquart, 2015). Therefore, if children perceive control techniques such as physical discipline and psychological control as merely normative methods of correcting their misbehaviour, these high levels of control would be associated less strongly with negative child outcomes (Lansford et al., 2005; Nunes et al., 2013).

With regard to the role of cultural values models in literature on bullying, it has been proposed that the effects of certain parenting dimensions may also be culture specific, although only limited studies on this matter have been conducted thus far. For example, perceived parental lax control predicted bullying and cyberbullying perpetration in some cultures but not in others (Brown et al., 2007; Shapka & Law, 2013). Findings such as these promote the idea of implementing culturally sensitive parenting programmes in combating the problem of bullying.

As can be seen from the discussions above, the effect of perceived parenting behaviour on adolescent behavioural outcomes could differ potentially, depending on the cultural values of the ethnic group (Hoskins, 2014). It is believed that the effect of parenting behaviour in which adolescent autonomy is discouraged, emotional expression is limited, and where strict rules are imposed may especially be detrimental to adolescents living in individualistic cultures in which independence and assertiveness are valued (Hoskins, 2014; Liu & Guo, 2010). Hence, optimal parenting would depend on the cultural context in which the parent and child interacts (Calafat et al., 2014). Determining the similarities and differences in associations between parenting and adolescent problem behaviour across cultural groups is vital, as many parent-based theories and intervention programmes containing a parenting component have been developed with predominantly white samples; which questions their applicability in other ethnic groups (Windle et al., 2010). This is especially relevant in a multicultural society such as South Africa, where white learners actually form part of the minority group (in terms of population size). This would imply that simply implementing existing Westernised theories and programmes in the South African context would be missing the majority of learners. If research studies are able to confirm that similar relations between parenting and adolescent outcomes exist cross-culturally, all existing and newly developed

intervention programmes based on white adolescents will also be appropriate to implement in non-white populations (Windle et al., 2010). In the case of ethnic differences, however, theories and programmes that have been developed based on patterns of relationships for the majority ethnic group would be ineffective in minority ethnic groups (Shapka & Law, 2013).

In sum, there are currently many uncertainties regarding the manner in which culture affects the manifestation, relevance, and effects of parenting dimensions (Hoskins, 2014; Masud et al., 2015; Nunes et al., 2013). Consequently, the need to understand parent-child interactional processes in varying cultural contexts better still remains—a goal that the current research study attempts to undertake (Bibou-Nakou et al., 2013; Brown et al., 2007). The next section focuses on how each of the three bipolar parenting dimensions affects preadolescent developmental outcomes.

4.5 Developmental Outcomes

Social environments such as families, schools, and peer groups provide preadolescents with the necessary contexts in which they can socialise, engage in interpersonal relationships, and distinguish between acceptable and non-acceptable behaviour (Erginoz et al., 2015). In considering the risk and protective factors for child and adolescent well-being and problem behaviour, parenting is often among the most commonly identified factors (Hoskins, 2014; Windle et al., 2010). Research indicates that different parenting dimensions may predict a specific child developmental outcome (equifinality), or that multiple states of child adjustment across various areas of functioning can be predicted by the same parenting dimension (multifinality) (Cicchetti, 2006). In fact, an extensive body of research has associated each of the three core parenting dimensions—parental acceptance, firm (behavioural) control, and psychological control—with similar, as well as diverse indicators of child and adolescent well-being and maladjustment. These are reviewed in the sections to follow.

4.5.1 Acceptance versus rejection. It has been found that parental warmth or acceptance correlates directly with a variety of positive child and adolescent outcomes such as life satisfaction (Di Maggio & Zappulla, 2014), friendships (Salaam & Mounts, 2016), academic achievement (Pinquart, 2015), high self-esteem, and positive worldview (Hoskins, 2014; Khaleque, 2013). In contrast, low levels of acceptance (i.e., implying high levels of rejection) is related to both internalising and externalising behavioural outcomes in both

preadolescents and adolescents, including anxiety, depression, difficulties in regulating emotions, delinquency, and substance use (Buschgens et al., 2010; Di Maggio & Zappulla, 2014; Hoskins, 2014; Janssens et al., 2015; Marici, 2015; Reitz et al., 2006; Saritaş et al., 2013; Wei & Kendall, 2014).

Many theoretical models of parenting emphasise the crucial role of acceptance in child and adolescent development and adjustment, including that developed by Schaefer (1965a, 1965b), parenting style research (Baumrind, 1966; Maccoby & Martin, 1983), attachment theory (Ainsworth & Bowlby, 1991), and parental acceptance-rejection theory (Rohner & Khaleque, 2010). Apart from theoretical models, findings from various studies have also highlighted the importance of parental warmth or acceptance in optimum parenting. For example, Jiménez-Iglesias, Moreno, Ramos, and Rivera (2015) found that parental warmth was the most important dimension for higher global well-being in adolescents.

4.5.2 Firm control versus lax control. Apart from its main effects, it has been shown that parental acceptance in combination with high behavioural control resulted in positive outcomes such as reduced anxiety (Salaam & Mounts, 2016) and lower levels of internalising and externalising problems (Windle et al., 2010). Such combinations of high parental warmth and behavioural control characterise an authoritative parenting style (Baumrind, 1966). However, some researchers (e.g., Galambos et al., 2003) propose that, instead of warmth, behavioural control may be most effective in reducing adolescents' involvement in problem behaviour. For example, behavioural control activities (e.g., consistent discipline, limit setting, parental monitoring, or supervision) exerted at appropriate levels serve to protect children and adolescents against internalising- and externalising problems experienced during adolescence, as well as those that first emerge during early adulthood (Di Maggio & Zappulla, 2014; Hoeve et al., 2009; Hoskins, 2014; Roche et al., 2008; Windle et al., 2010). As with parental acceptance, behavioural control has been linked consistently to positive child and adolescent outcomes such as life satisfaction (Di Maggio & Zappulla, 2014) and academic achievement (Pinquart, 2015), which illustrates the concept of equifinality. However, as will be discussed in the sections to follow, perceived parental behavioural control may not always be beneficial to preadolescent outcomes, because the outcome is dependent on how behavioural control is conceptualised. Additionally, even though behavioural control is usually considered a positive aspect of parenting, it may not be as beneficial when combined with other less desirable parenting dimensions. For instance, some authors (e.g., Aunola & Nurmi, 2005; Galambos et al., 2003) found that the positive influence of behavioural

control—which aims to shield adolescents against externalising problems—vanishes when coupled with high levels of psychological control.

4.5.3 Psychological autonomy versus psychological control. Even in the context of high parental acceptance, some studies (e.g., Aunola & Nurmi, 2005; Salaam & Mounts, 2016) found that high levels of psychological control increased child and adolescent problem behaviour, possibly by creating a parent-child relationship characterised by enmeshment and inconsistent messages of parental affection. Although it would appear that researchers generally find significant relations between psychological control and internalising problems, associations with externalising problem behaviour are common. For example, Hovee et al. (2009) conducted a meta-analysis in which they found that psychological control, as opposed to behavioural control, had a stronger link to delinquency. In fact, psychological control seems to have some of the strongest and most detrimental effects on preadolescent and adolescent development, including higher rates of depression, loneliness, anxiety, withdrawal behaviour, somatic complaints, social problems, rule-breaking behaviour, attention problems, poor academic achievement, and social problems (Doyle & Markiewicz, 2005; Janssens et al., 2015; Marici, 2015; O'Donnell, Moreau, Cardemil, & Pollastri, 2010; Piquart, 2015; Wei & Kendall, 2014). Thus, from the findings reported above, it would appear that high levels of psychological control, whether its effects are studied in isolation or in combination with parental acceptance or behavioural control, is a very powerful predictor of child and adolescent maladjustment (Aunola & Nurmi, 2005).

From the above discussions, it is evident that the three core parenting dimensions (acceptance, firm control, and psychological control) play an important role in child and adolescent socialisation processes. In terms of maladjustment, it would appear that, as opposed to internalising behaviour, there is a stronger relationship between parenting and externalising problem behaviour, particularly with regard to child and adolescent aggression (Reitz et al., 2006). This association between perceived parenting dimensions and child or adolescent aggression is reviewed in the next section, followed by a discussion on the relations between parenting dimensions and one specific form of aggression, namely bullying.

4.6 Perceived Parenting Dimensions and Bullying

4.6.1 General aggression. Numerous studies (e.g., Brown et al., 2007; Nunes et al., 2013; Stoltz et al., 2013), including a recent meta-analysis conducted by Khaleque (2013),

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

have consistently correlated parental acceptance with lower rates of reactive and proactive aggression (the latter often being employed by perpetrators), whereas parental rejection has been linked to heightened levels of aggression in children and adolescents. In fact, a study conducted by Buschgens et al. (2010) demonstrated that perceived parental rejection had a stronger effect on preadolescent aggression, as compared to its influence on other behavioural outcomes (e.g., inattention, impulsivity, and hyperactivity). Further demonstrating the favourable outcomes of parental acceptance, Salaam and Mounts (2016) verified that acceptance moderated the relationship between behavioural control and physical aggression in adolescent boys, in that low acceptance in conjunction with higher behavioural control was linked to higher levels of physical aggression. In contrast, high levels of acceptance, together with high levels of behavioural control, were associated with lower physical aggression in boys. By consistently implementing developmentally appropriate boundaries, parents can assist their children and adolescents in understanding the dynamics inherent in interpersonal relationships, as well as to identify and manage difficult emotions like frustration and anger (Wolfe & McIsaac, 2011). Therefore, if parents display low levels of behavioural control (i.e., lax control), in which they fail to monitor their child or adolescent's behaviour or react inappropriately to child and adolescent impulses, their children may not be able to control their negative emotions. In turn, the child or adolescent could display high levels of any type of aggressive behaviour when feeling angry (Brown et al., 2007; Kokkinos & Voulgaridou, 2016; Nunes et al., 2013; Salaam & Mounts, 2016; Stoltz et al., 2013). Likewise, if parents attempt to control their child or adolescent's behaviour using psychological tactics (i.e., psychological control), this will also increase the likelihood that the child or adolescent will act in physically and/or relationally aggressive ways (Casas et al., 2006; Kawabata et al., 2011; Marici, 2015). Moreover, findings from a recent meta-analysis revealed that this relation between parental psychological control and child aggression strengthened with age, as evidenced by the fact that a greater effect size existed for preadolescents and adolescents, in comparison to younger children (Kuppens et al., 2013). Findings from various studies (e.g., Kokkinos & Voulgaridou, 2016) also demonstrated negative associations between parents who grant their adolescents psychological autonomy and those adolescents' involvement in aggressive acts. Such results reflect the increased susceptibility of adolescents to the effects of parents' psychological control, due to their developmental needs for attaining identity and autonomy (Wieder, 2001).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

However, not all aspects of parenting are related to aggressive behaviour in the same way (Georgiou & Stavrinides, 2013). For example, it has been noted that parental behavioural control is multidimensional in nature, with interventions needing to take advantage of its beneficial effects, while simultaneously avoiding its negative aspects (Li et al., 2015). With respect to the specific type of aggressive behaviour displayed, it has been assumed generally that this should reflect the form of parenting displayed. In other words, physically aggressive parenting (e.g., corporal punishment) should predict adolescent physical aggression (or perhaps even physical bullying perpetration), whereas parental psychological control would lead to adolescent relational aggression. However, findings from various studies (e.g., Nelson & Coyne, 2009) showed that there was no specific relation between the form of parenting and adolescent aggression, but rather a generalised connection between negative parenting and adolescent aggression. .

In summary, it appears that the literature regarding perceived parenting dimensions, developmental outcomes, and aggression consistently links parental acceptance and behavioural control with positive developmental outcomes and lower rates of aggression, while psychological control is related more strongly to child maladjustment, including high rates of aggression (Bean et al., 2006; Hoskins, 2014; Kuppens, Grietens, Onghena, & Michiels, 2009a). Thus, optimal developmental outcomes will be facilitated by parents' consistent application of concrete forms of discipline (i.e., firm control), together with the avoidance of strategies aimed at undermining their sense of self (Wolfe & McIsaac, 2011).

In comparison to research regarding childhood and adolescent aggression, less is known about the family context of youths involved in bullying, especially about the families of children and adolescents characterised as victims or bully-victims (Bibou-Nakou et al., 2013; Boel-Studt & Renner, 2013). Even though it is evident that bullying has familial or parental risk factors that may overlap with those found in the literature concerning adolescent delinquency and aggression (Perren & Hornung, 2005), bullying is more than simply a once-off aggressive act. Furthermore, not all bullying involves violence, nor does all violence involve bullying (Ttofi & Farrington, 2011). Thus, bullying remains a distinct phenomenon with its own definitional criteria, which makes it imperative to study how parenting dimensions contribute to this problematic phenomenon. Therefore, associations between the core parenting dimensions (i.e., acceptance, behavioural control, and psychological control) and bullying are reviewed in the next section, in addition to the role of parenting in the phenomenon of cyberbullying.

4.6.2 Traditional bullying. The influence of parenting factors on child and adolescent bullying has been studied since the beginning of research on bullying. For example, Olweus (1980) identified three parenting characteristics that are related to bullying perpetration, namely parental lack of warmth and involvement, permissiveness towards child aggression, and utilising physically or verbally aggressive disciplinary techniques. Since then, researchers have provided adequate evidence that parent child-rearing behaviour influences bullying. Such evidence is provided by researchers who study the direct influences of parenting with regard to bullying (e.g., how supervision and discipline methods are linked to bullying), as well as researchers who have adopted a broader view of the family environment and concern themselves instead with how parenting is associated indirectly with bullying (e.g., attachment theory, social cognitive theory, and family systems theory) (Bibou-Nakou et al., 2013).

4.6.2.1 Acceptance versus rejection. Parental warmth or acceptance has consistently demonstrated negative correlations with bullying perpetration, victimisation, and bullying perpetration-victimisation, whereas parental rejection increases such behaviour in preadolescents and adolescents (Atik & Güneri, 2013; Bayraktar, 2012; Bibou-Nakou et al., 2013; Georgiou, 2008; Kokkinos, 2013; Perren & Hornung, 2005). Several hypotheses have been proposed for such findings: Similar to attachment theory (which is discussed in the following chapter), social learning theory highlights the importance of parent-child interactions in determining how children relate to others. According to this perspective, parenting behaviour that communicates warmth and acceptance may reduce the likelihood that a preadolescent will participate in aggressive acts in school, by means of assisting the preadolescent in being friendly to (less powerful) peers and thus becoming socially more accepted (Georgiou, 2008). In contrast, children and adolescents who grow up in a household where the parents interact with them in a hostile, cold, or rejecting manner may imitate these interactions when dealing with others, thereby increasing their chances of becoming perpetrators of bullying. Such parent-child interactions may also condition the adolescent to adopt an identity as a troublemaker, bully, or delinquent, which could encourage the adolescent to act in accordance with this stigma (Pontzer, 2010). Furthermore, a study conducted by Papadaki and Giovazolias (2015) demonstrated how parental rejection indirectly influenced bullying perpetration by way of eliciting depressive symptoms in the preadolescents, who in turn might have engaged in bullying possibly as a means of managing their unpleasant emotional states.

For bullying victimisation, accumulating evidence suggests that certain social and emotional skills—the development of which is largely because of family systems and parenting behaviour—may contribute to the onset and maintenance of victimisation (Healy, Sanders, & Iyer, 2015). Although one should be careful not to equate such findings with the notion that the victim is to blame for being bullied, there is ample literature that identifies certain traits in victims that could make them easy targets for bullying. Some of these characteristics may include the lack of assertiveness (Healy et al., 2015), low self-esteem (Cassidy, 2009; Olweus, 1994), poor social competence and problem-solving skills (Cassidy & Taylor, 2005; Cook et al., 2010), anxiety (Healy et al., 2015), and poor emotional regulation (Bettencourt et al., 2013; Habashy Hussein, 2013). In fact, several studies have already demonstrated how various parenting factors may influence the development of social and emotional regulation skills such as those listed above (e.g., Hoskins, 2014; Salaam & Mounts, 2016; Saritaş et al., 2013), which only strengthens the claim that parenting plays an important role in the onset and maintenance of bullying. Adding to this mounting evidence, Papadaki and Giovazolias (2015) showed how parental rejection resulted in depressive symptoms in preadolescents, which in turn might have caused them to act in passive and submissive ways, thus resulting in being victimised at school.

The importance of parental acceptance is highlighted further by studies illustrating how both victims and perpetrators of bullying who perceive their parents as supportive experience the harmful effects of bullying at a lower intensity (Bowes et al., 2010; Claes, Luyckx, Baetens, Van de Ven, & Witteman, 2015). Thus, perceived parental acceptance may also serve as a buffer against the emotional consequences resulting from bullying.

4.6.2.2 Firm control versus lax control. A parent-child relationship characterised by warmth and acceptance may also promote voluntary adolescent disclosure regarding problem behaviour, thus providing parents with the knowledge regarding their adolescent's whereabouts and any difficult situations in which they may find themselves. In turn, this may grant parents the opportunity to intervene and guide their adolescents to successful outcomes (Wilson et al., 2013). To some extent, such knowledge may also be acquired through parental behavioural control methods such as monitoring and implementing rules and regulations on the child's activities and peer associations (Stavrinides et al., 2015). As adolescents are confronted frequently with various opportunities to become involved in problem behaviour (e.g., bullying, delinquency, and substance abuse), adequate parental behavioural control is needed to protect adolescents from deviant peers and/or situations that would enable their

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

participation in, or victimisation due to such behaviour (Erginoz et al., 2015; Georgiou & Fanti, 2010).

In support of such claims, various authors have found that across developmental periods, parenting behaviour that reflects lower levels of behavioural control (e.g., poor supervision, monitoring, and few rules) predicts higher rates of bullying perpetration and victimisation (Atik & Güneri, 2013; Erginoz et al., 2015; Georgiou & Fanti, 2010; Lucia, 2016; Marini et al., 2006; Wilson et al., 2013). Although this finding accounts for direct and indirect forms of bullying perpetration and victimisation in most cases, there are still studies that find the association between parental behaviour control and adolescent bullying involvement to be different, depending on the type of bullying (e.g., Marini et al., 2006). The existence of such studies only further underscores the need to distinguish between various forms of bullying. Thus, parents who do not set clear rules for, or respond in a developmentally appropriate manner toward their child's aggressive behaviour are modelling a tolerant attitude towards such behaviour, which is observed by the child and subsequently imitated in the peer context (Olweus, 1994).

Lack of adequate parental monitoring or rules regarding misbehaviour and harsh disciplinary practices may create certain social cognitive biases in children and preadolescents (e.g., favourable beliefs regarding the use of aggression, hostile attributional biases, and social goals of domination and revenge) (McDonald, Baden, & Lochman, 2013; Nelson & Coyne, 2009), which in turn increase their participation in direct and indirect bullying as perpetrators, victims, or bully-victims (Chaux & Castellanos, 2014; Chaux, Molano, & Podlesky, 2009; Marini et al., 2006; Ziv et al., 2013). However, other studies produced contradictory results. For example, Georgiou and Stavrinides (2013) found no association between parental monitoring and bullying perpetration and victimisation, which possibly reflected parental disengagement from the adolescent's problem behaviour.

Further controversies also seem to exist in literature on bullying regarding the exact role and benefits of parental behavioural control (Stavrinides et al., 2015). A possible explanation for these contradictory findings might stem from different conceptualisations and measurements of the concept of behavioural control (Aunola & Nurmi, 2005; Li et al., 2015). For example, this concept has been operationalised as parental knowledge (i.e., the extent to which parents are aware of their child's whereabouts, activities, and peer associations) or supervision, as parent strictness or restrictiveness (i.e., the degree to which parents oppress the

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

adolescent by dominating the parent-child relationship), as limit setting or maturity demands (i.e., reasoning about rules and the consequences of misbehaviour), or as parental solicitation (i.e., the extent to which parents directly ask their children for information) (Aunola & Nurmi, 2005; Reitz et al., 2006). Depending on how behavioural control is operationalised, different associations with adolescent outcomes will be found. For example, in a study conducted by Stavrinides et al. (2015), parental solicitation was associated negatively with bullying perpetration, whereas increased parental exercise of control (in the form of imposed rules and restrictions) predicted higher involvement of adolescents in bullying perpetration. Additionally, Litovsky and Dusek (1985) found that when early adolescents perceived their parents as high on firm control, they could be interpreting this as parental attempts to over-regulate their behaviour, thus resulting in low self-esteem. Therefore, instead of the intuitive expectation that behavioural control is protective in nature, some aspects of this dimension (e.g., imposing control or regulating child behaviour) might be perceived by adolescents striving for autonomy as an invasion into their privacy, consequently producing the opposite effect. However, in a study conducted by Li et al. (2015), it was found that instead of lowering the likelihood of victimisation, no association between parental behavioural control and overt or relational victimisation was found. In their study, behavioural control was assessed as parental solicitation and restriction, the latter being defined as children having to ask their parents' permission before going out, or to report to their parents where they have been or what they have been doing. It was speculated that when behavioural control was assessed in this manner, it perhaps provoked children to feel controlled by their parents. Once these feelings were controlled for, however, parental behavioural control appeared to produce effects that were more positive (Kerr & Stattin, 2000).

Studies that conceptualised and measured behavioural control primarily as parental knowledge found a positive effect on adolescent adjustment, whereas parental strictness would instead have a negative effect on adolescent outcomes (Reitz et al., 2006). Studies defining behavioural control in terms of parent knowledge held the initial assumption that such knowledge would derive mainly from and thus reflect parental monitoring or control efforts. However, it has become apparent that such parental knowledge results more from voluntary adolescent disclosure of information than from parental efforts of monitoring and control, thus representing adolescent behaviour rather than parental behaviour (Kerr et al., 2012). Therefore, it was recommended that measures focusing on parental behavioural control should include only items on parent behaviour, as the inclusion of knowledge items (which

may reflect both parent and adolescent behaviour) might create associations between parent behavioural control and adolescent adjustment that seem stronger than they would be if the knowledge items were excluded.

Other studies define behavioural control in terms of an authoritarian parenting style in which control is characterised as coercive and employs punishment techniques to assert power (Li et al., 2015). Such studies have demonstrated how authoritarian parenting is associated with increased bullying perpetration and victimisation (Chaux & Castellanos, 2014). Authoritarian parents seem to raise their children to value power (e.g., social status) and to reject individuals from out-groups, thereby increasing the likelihood that their child will engage in aggressive behaviour such as bullying (Knafo, 2003). Additionally, their frequent use of harsh, power-assertive disciplinary practices (e.g., physical and psychological aggression) could normalise the use of violence, causing increased involvement in bullying perpetration as children perceive aggression as a lawful way to interact and exert control over others (Gómez-Ortiz et al., 2016). Such harsh forms of discipline may also fail to meet emotional needs of adolescents and discourage emotional sensitivity towards others, thereby inhibiting the development of adolescent empathy, which in turn increases both direct and indirect bullying perpetration at school (Chaux & Castellanos, 2014; Chaux et al., 2009; Curtner-Smith et al., 2006).

In terms of victimisation, Gómez-Ortiz et al. (2016) found that increased use of parental behavioural control would favour the use of aggressive psychological disciplinary techniques, which in turn leads to higher bullying victimisation. Adolescents who are exposed to such harsh parenting practices may learn that they are powerless and have less self-confidence and assertiveness, which renders them easy targets for perpetrators (Lereya et al., 2013).

Although behavioural control and psychological control by parents have been identified as two distinct constructs, it would appear that when these are exerted at high levels, adolescents do not differentiate between these parenting dimensions (Anderson & Branstetter, 2012). Therefore, this would suggest that when the level of behavioural control moves beyond a certain point, adolescents may perceive it as intrusive and controlling (i.e., resembling psychological controlling behaviour of parents).

4.6.2.3 *Psychological autonomy versus psychological control.* In contrast to the other dimensions of parenting, the influence of parental psychological control on adolescent

problem behaviour (including bullying) has not yet been researched sufficiently (Batanova & Loukas, 2014; Bean et al., 2006), possibly because this construct of parenting was mostly neglected in empirical research until it was emphasised again in the 1990s (Barber, 1996; Steinberg, 1990). Of the studies that have been conducted, many confirm the negative effect of parental psychological control on both bullying perpetration and victimisation (Bayraktar, 2012; Li et al., 2015). In fact, some of these studies even found that the use of parental psychological control was associated with negative adolescent outcomes (including bullying victimisation) over and above the effects of behavioural control (e.g., Li et al., 2015). Such findings are especially relevant during the period of preadolescence, due to the developmental needs of seeking greater autonomy and achieving a stable identity. Thus, preadolescents may be particularly sensitive to any parental acts (e.g., restriction of independence or preventing the adolescent from taking initiative) that can interfere with their development as autonomous individuals (Kuppens et al., 2013). In fact, various studies have shown that preadolescents and adolescents may perceive their parents' use of high levels of acceptance and control as overprotective, consequently leading to increased victimisation experiences (Boel-Studt & Renner, 2013; Georgiou, 2008; Kokkinos, 2013; Lereya et al., 2013). The sheltering effect of such overprotection would cause these children to struggle with developing autonomy and assertion—qualities that again can make them appealing to perpetrators (Boel-Studt & Renner, 2013).

Adolescents of parents who score high on psychological control would be forced to conform to their parents' demands and viewpoints by sacrificing their own independent thoughts and emotions (Li et al., 2015). In turn, such conformity could result in these adolescents adopting compliant and passive interactional styles that would diminish their ability to manage peer conflicts successfully, thus rendering them vulnerable to be targeted by perpetrators (Perry, Hodges, & Egan, 2001). Indeed, Li et al. (2015) found a positive association between parental psychological control and both overt and relational adolescent victimisation that was mediated partially by adolescent self-control. This suggests that when parents intrude on their adolescents' inner thoughts and feelings, it diminishes the adolescent's ability to develop the skill of self-control. In turn, these adolescents are less likely to inhibit inappropriate behaviour (e.g., impulsiveness) and become prone to victimisation. In fact, various studies (e.g., Reijntjes et al., 2011) confirm that adolescents' externalising behaviour increases the risk for later peer victimisation. A study conducted by Batanova and Loukas (2014) further revealed how depressive symptoms mediated the

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

relationships between maternal psychological control and both overt and relational peer victimisation in a sample of preadolescents and adolescents. In other words, when mothers engage in behaviour such as love withdrawal, guilt induction, or invalidation of emotions, preadolescents and adolescents will internalise these problems that they experience with their parents in the form of sad and withdrawn behaviour. When such behaviour is displayed in a peer context, it could render them vulnerable to all forms of victimisation.

In terms of bullying perpetration, the central role of promoting adolescent autonomy was confirmed by Gómez-Ortiz et al. (2016). In their study, granting of autonomy was related significantly to bullying perpetration in two separate pathways. Firstly, it was revealed that this parenting dimension influenced adolescent bullying perpetration directly in that granting of higher autonomy resulted in lower bullying perpetration. Secondly, this study also revealed an indirect effect of promotion of autonomy on bullying perpetration by way of parental psychological aggression. Thus, parenting characterised by lower levels of granting of autonomy endorses the use of psychologically aggressive disciplinary techniques (e.g., withholding affection, blaming, and yelling), which in turn lead to increased bullying perpetration in adolescents. As with corporal punishment, psychological control tactics have also been shown to contribute to hostile intent attributions (Nelson & Coyne, 2009), which in turn can contribute to bullying perpetration in children and adolescents (e.g., Ziv et al., 2013).

From the discussions above, it is clear that all three core parenting dimensions are associated with child and adolescent bullying perpetration and victimisation either directly or indirectly. In the section to follow, the association between each of these bipolar parenting dimensions and cyberbullying perpetration and victimisation will be investigated.

4.6.3 Cyberbullying. Compared to traditional forms of bullying, less is known of the mechanisms responsible for cyberbullying, especially regarding factors in the family context (Low & Espelage, 2013). Parent or family influence could be regarded as an important area of study, as most online activity (including cyberbullying) occurs in the home environment, thus making parents key role players in intervening and preventing such behaviour (Cassidy, Brown, & Jackson, 2012; Makri-Botsari & Karagianni, 2014).

4.6.3.1 Acceptance versus rejection. As with traditional bullying, cyberbullying perpetration is correlated negatively with perceived parental warmth, acceptance, or support (Kokkinos et al., 2016; Wang et al., 2009). In fact, the significance of this parenting

dimension has been emphasised by adolescents and parents alike. One qualitative study aimed to understand how parents could intervene in cyberbullying in a sample of 10- to 16-year-old preadolescents and adolescents (Navarro & Serna, 2015). The participants acknowledged that good parental support and communication were key necessities for them to be able to discuss their online experiences (including incidents of cyberbullying) with their parents. Thus, children and adolescents who perceived their parents as supportive or accepting are more likely to approach them to ask for help, thus placing parents in a position where they can possibly intervene and prevent further bullying perpetration or victimisation (Buelga, Martínez-Ferrer, & Musitu, 2015). Another study attempted to gain insight regarding parents' perspectives on solutions to cyberbullying (Cassidy et al., 2012). The findings revealed that instead of increasing the levels of monitoring and punishment, the majority of parents opted for communication that is more open regarding such issues to foster positive interchanges. These parents further acknowledged that for their children to behave more prosocially, the parents themselves would need to model this type of behaviour in their homes. Apart from its direct effect, parental support also may influence cyberbullying victimisation indirectly by lessening adolescent Internet addiction (Yang, Lu, Wang, & Zhao, 2014), a factor that has been found to increase the probability of being targeted by perpetrators of cyberbullying (Leung & Lee, 2012). Fridh, Lindström, and Rosvall (2015) emphasised the importance of this parenting dimension and demonstrated that parental support had both a stress-buffering and main effect on the relation between cyberbullying victimisation and adolescents' health complaints. In other words, parental support interacted with the level of cyberbullying victimisation, causing its positive influence on adolescent health outcomes to vary among learners (particularly boys). Moreover, parental support also had an overall beneficial effect in that it reduced adolescent health complaints, regardless of how much cyberbullying they experienced (Fridh et al., 2015).

4.6.3.2 Firm control versus lax control. The media and Internet safety books often advocate controlling and monitoring an adolescent's online activities by installing Internet software or by conducting regular inspections of the browsing history of the computer to reduce unwanted behaviour such as cyberbullying (Law, Shapka, & Olson, 2010). In support of these claims, several studies measuring preadolescents' and adolescents' perceptions of their parents' behavioural control efforts over either their Internet or offline activities (e.g., Kokkinos et al., 2016; Kowalski et al., 2014; Shapka & Law, 2013) indeed found that lower levels of parental monitoring and limit-setting was associated with higher levels of

cyberbullying perpetration and victimisation. Studies also found that when preadolescents and adolescents had computers in their bedrooms (where there is less parental supervision) they were more likely to become involved in cyberbullying (Walrave & Heirman, 2011). Furthermore, Kokkinos et al. (2016) illustrated that instead of specific parental Internet practices (e.g., rules regarding the content or time spent on the Internet), general parenting dimensions (i.e., acceptance, behavioural control, and psychological control) rather play a more significant role in affecting preadolescents' online activities; including cyberbullying. This implies that, to combat cyberbullying successfully, parents need to not only implement specific rules and regulations regarding Internet use, but also modify their behaviour and interactions with their children on a broader level.

However, other researchers (e.g., Cassidy et al., 2012; Leung & Lee, 2012) question the value of parental monitoring attempts to reduce online aggression. Their findings revealed that, regardless of the level or type of parental supervision or control employed, it was not significantly related to preadolescent or adolescent cyberbullying, or only had a minimal effect at best. Thus, attempting to control preadolescent and adolescent online or offline behaviour seems to have been ineffective in preventing them from engaging in cyberbullying perpetration, or to protect them from being bullied online. Zhou et al. (2013) suggest that, because cyberbullying can happen irrespective of place or time, adolescents may always be vulnerable to cyberbullying experiences. Therefore, regardless of strict supervising efforts at home, adolescents can still be involved in cyberbullying at school or by gaining access to an electronic device only once. Consequently, it appears that findings regarding the effectiveness of firm control in preventing preadolescent cyberbullying are mixed.

4.6.3.3 *Psychological autonomy versus psychological control.* In comparison with perceived parental firm control, little attention has been directed to the role of perceived parental psychological control in child and adolescent online activities (Yang et al., 2014). As with other dimensions of parenting, psychological control apparently has a similar effect in the cyber world as in face-to-face adolescent interactions. For example, Kokkinos et al. (2016) found that perceived parental psychological autonomy was significantly and negatively correlated with online disinhibition, as well as with cyberbullying perpetration and victimisation in a sample of preadolescents. Thus, parents who are democratic and non-intrusive in their interactions with their adolescents promote responsible and self-regulated behaviour, which in turn has been associated with lower rates of cyberbullying (Udris, 2014). Findings from a study conducted by Fousiani, Dimitropoulou, Michaelides, and Van Petegem

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

(2016) further illustrate the importance of perceived parental psychological control and autonomy support in adolescent cyberbullying perpetration. This study first revealed that perceived parental psychological control had a direct positive relationship with cyberbullying perpetration, whereas perceived parental psychological autonomy indirectly correlated negatively with such perpetrating behaviour. More specifically, when adolescents perceived their parents as supporting their need for autonomy, they experienced autonomy satisfaction (i.e., feeling more self-determined, autonomous, and effective/skilful in the activities they undertake), which in turn predicted higher empathic concern towards others. Such affective empathy would foster an adolescent's capacity to identify uniquely human characteristics in others (i.e., recognise civilised and moral individuals), which in turn related to less cyberbullying perpetration. Thus, by responding empathically towards their adolescent's perspective, discussing the use of social-networking sites, and co-creating rules for online behaviour, parents may play an active role in preventing the manifestation of cyberbullying (Fousiani et al., 2016; Kokkinos et al., 2016).

Thus, it appears that when preadolescents and adolescents face difficulties of any kind in their relationships with their parents, they could subsequently attempt to satisfy their needs for freedom, attention, power, or recognition by means of aggressive acts such as bullying, even in an online environment. However, studies reported in literature on bullying and cyberbullying continue to produce contradictory results, thus calling into question whether the associations between perceived parenting dimensions and bullying could be affected by additional variables that possibly moderate these relationships. Hence, an additional aim of the current study was to examine the influence of gender and ethnicity on the relationships between various perceived parenting dimensions and bullying, which is discussed in Sections 4.4.2 and 4.4.3.

In the following section, matters of measurement such as approaches to the study of parenting (categorical versus dimensional) and the measurement techniques (observations, interviews, and self-reports) are discussed. The section concludes with an overview on the CRPBI-30, the self-report that was utilised in the current investigation.

4.7 Measurement

4.7.1 Methods of assessment

4.7.1.1 *Categorical versus dimensional approach.* As discussed in Section 4.3, parenting behaviour can be studied in the form of either categories (a typological approach) or individual dimensions (a dimensional approach). Both approaches have their own advantages and limitations (see Section 4.3.3). The current study made use of a bipolar dimensional approach, based on the reasons outlined in Section 4.3.3. More specifically, the theoretical perspective defined by Schaefer (1965a, 1965b) was adopted, and subsequently, the current study made use of an abbreviated version of his parenting inventory (i.e., CRPBI-30) to measure perceived parenting dimensions. This inventory, as well as the reasons for its inclusion in the research study, is discussed in Section 4.7.2.

4.7.1.2 *Observational methods, interviews, and self-reports.* Various measurement techniques exist for assessing the construct of parenting, including observations (i.e., naturalistic in the home environment, or structured observations in a formal setting), open-ended interviews, and parent and child self-report questionnaires. Every form of measurement approach provides a different view of family functioning (Alderfer et al., 2008); thus, it cannot be assumed that each provides equivalent information.

Various strengths and limitations are inherent in each form of assessment measure. Zaslow et al. (2006) outline three issues that determine the relative burden of different methodologies, namely (a) the time required for administration and coding, (b) the financial costs involved, and (c) the level of expertise and training necessary for assessment. Using these criteria, the authors concluded that the most burdensome parenting assessment method was structured observations, followed by naturalistic home observations. Self-reports involved the least amount of burden. In addition, Zaslow et al. (2006) found that it was best to include a structured observational method when attempting to predict child outcomes. Also, it is often recommended that to obtain a complete view family functioning, multiple methods or informants (e.g., parents, peers, and teachers) of individual behaviour should be used (Jabeen et al., 2013; Polfuss & Frenn, 2012). However, in studies where maximising sample size is of particular importance (such as in the current study), less burdensome measures (e.g., self-reports) would still provide useful information (Zaslow et al., 2006).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Self-report measures do not measure the “real” versions of parenting behaviour but rather provide information regarding the individual’s perceptions of parenting. Two forms of self-report measures can be used to assess parenting behaviour, namely child and parent reports. Several limitations are inherent in each of these measures. For example, adolescents’ responses may be influenced by immaturity, emotional fluctuations, and reporting what they think their parents would value in order to achieve parental acceptance (Elstad & Stefansen, 2014; Hare, Marston, & Allen, 2011). In contrast, measures in which parents have to assess their own parenting behaviour hold the risk of parents answering in a biased manner to present a more favourable image of their parenting (i.e., underreport negative parenting behaviour). For example, Schwarz, Barton-Henry, and Pruzinsky (1985) found that parents rated themselves as more accepting and firm compared to the ratings given by their children.

In spite of these limitations, it would appear that most researchers in the field of parenting utilise child and adolescent self-reports. For example, various researchers such as Schaefer (1965a) propose that children’s perceptions of parental behaviour in fact are more relevant to their adjustment and future development than the actual behaviour of the parents. Therefore, when studying psychological and relational processes in children and adolescents, their perceptions of phenomena may be preferred. Because the content of most parenting measures focus on the parent’s behaviour, as opposed to how the child feels about the parent’s behaviour, this may account for the relative accuracy of child self-reports. Furthermore, Hazzard, Christensen, and Margolin (1983) argued that it would only be sensible to assess the child’s understanding of the family environment, as most family or parenting interventions are implemented for the child’s benefit. Research that is more recent also confirms that preadolescents not only are able to report on their parents’ behaviour reliably and validly, but in fact also may be the most appropriate informants on parenting behaviour, seeing that they are at the receiving end of such behaviour (Kuppens et al., 2009a; Lansford et al., 2005). In other words, if children and adolescents experience their parents as accepting, regardless of how parents rate themselves or appear to observers, this is what matters (Elstad & Stefansen, 2014). In terms of psychological control, for example, Barber (1996) substantiated these claims by reporting that “self-reports from children may be the most valid way to measure psychological control since feeling controlled, devalued, manipulated, and criticised is very much a subjective experience” (p. 3303). The current study was interested in determining how parenting dimensions related to bullying in preadolescents (i.e., behaviour practised and experienced by the participants themselves) in a large sample of preadolescents across the

Free State. Therefore, it was decided that preadolescent self-reports would be the most appropriate and practical choice of measurement. More specifically, the CRPBI-30 was utilised in the current study.

4.7.2 Children’s Report of Parental Behaviour Inventory 30 (CRPBI-30). The CRPBI-30 is one of the earliest, most thoroughly documented, and frequently used measures that assess parenting (Barber et al., 2005; Pinquart, 2015; Schaefer, 1965a, 1965b; Schludermann & Schludermann, 1970). Because many current parenting measures utilise items or scales from the CRPBI, it can be regarded as the “parent” of parenting measures (Skinner et al., 2005).

Schaefer (1965a, 1965b) believed that, to understand a parent’s approach to child rearing better, it would be best to look beyond specific parental behaviour and instead adopt a “molar” (i.e., global) view of parenting. He conceptually grouped specific, observable parenting practices into broader categories or concepts (at an intermediate level of abstractness and generality), based on their potential to alter the emotional effect of parenting on child outcomes. In turn, these intermediate-level scales would define the poles of the most molar and abstract bipolar dimensions of parenting, namely acceptance versus rejection, firm control versus lax control, and psychological autonomy versus psychological control. In this way, Schaefer formulated a hierarchical conceptual scheme for parenting behaviour (Schaefer, 1965a).

Based on a child’s reports, parental behaviour would be placed along the axis of each of these three orthogonal (i.e., minimally overlapping) parenting dimensions (Schaefer, 1965b; Schludermann & Schludermann, 1970). This three-dimensional parenting model was also supported in older samples, as evidenced by Graybill and Gabel (1978), utilising a preadolescent sample. The first core dimension, acceptance versus rejection, refers to the degree to which children feel that their parents are accepting or rejecting. The positive pole (i.e., acceptance) is defined best by scales such as Expression of affection, Positive involvement, Positive evaluation, Acceptance, Sharing, and Emotional support, whereas the negative pole (i.e., rejection) is characterised by Ignoring, Neglect, and Rejection. Thus, parents perceived as accepting (i.e., those with higher scores) can be described as emotionally available and genuinely caring; whereas expressions of rejection (i.e., those with lower scores) include harshness, irritability, criticism, and disapproval, either in reaction to

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

perceived child provocation or initiated by the parent (independent of the child's behaviour) (Skinner et al., 2005).

In terms of the second core dimension of parenting, namely firm control versus lax control, Schaefer (1965a, 1965b) was one of the first to distinguish among multiple forms of parental control. Parental behavioural scales that best define this dimension include Control, Enforcement, Nonenforcement, Lax discipline, and Extreme autonomy (Schludermann & Schludermann, 1970). It represents the degree to which parents enforce strict versus lax discipline (e.g., whether children would be able to get away without doing the work they have been told to do) and the absence versus presence of allowing their child extreme independence (e.g., if the child would be able to go anywhere without asking) (Grolnick & Pomerantz, 2009). Stated differently, this dimension of parenting refers to how much parents control the child's behaviour by direct means such as implementing rules and regulations and insisting on adhering to these rules and limits (Schaefer, 1965a; Schludermann & Schludermann, 1970). Higher scores on this dimension reflect children's perception of parents' increasing attempts to regulate their lives.

The third core dimension, psychological autonomy versus psychological control, is defined mainly by parental behavioural scales such as Intrusiveness, Parental direction, and Control through guilt (Schaefer, 1965a, 1965b). These scales mainly describe indirect means of control—parental attempts to control the child through psychological pressure techniques—in that the child would not be able to develop as a person who is separate from his or her parent (Schaefer, 1965a; Schludermann & Schludermann, 1970). In other words, children would experience psychological controlling parents as dominant, rejecting, and overprotective. Furthermore, these parents would exploit the parent-child relationship through methods such as withdrawing love, inducing guilt, using shame, and possessiveness to gain control over the child's development (Barber, 1996; Grolnick & Pomerantz, 2009). In contrast, psychological autonomy is defined as the absence of such parenting features. Even though Schaefer introduced this dimension as psychological autonomy, Barber et al. (2005) note that Schaefer's own definition, as well as the majority of studies based on his work, instead focuses on psychological control. In fact, the CRPBI scale for this dimension consists of only psychological control items. Therefore, it has been suggested that this dimension completely comprises intrusive parenting behaviour perhaps because it wants to demonstrate how they would violate psychological autonomy (Barber et al., 2005). The polar opposite of psychological control is psychological autonomy or democracy (Steinberg, Lamborn,

Dornbusch, & Darling, 1992), characterising parents who promote individuation by encouraging individual expression (i.e., parents who respect and promote a child's autonomous thinking and functioning).

Barber et al. (2005) highlight several advantages of Schaefer's theoretical viewpoint, which contributed to the decision of including the CRPBI-30 in this study. These strengths include the fact that Schaefer's work was one of the most thoroughly documented assessments of parenting, that various (shortened) versions of his original inventory are still some of the most frequently used measures of parenting behaviour today, and that he made a useful distinction between the different forms of parental control. Furthermore, his belief that parenting should be assessed from the child's perspective is in line with the aim of the current study, namely to assess how preadolescents' experience of parenting contributes to their bullying perpetration or victimisation.

4.8 Chapter Summary

The study of parenting behaviour has been approached from two major perspectives; namely the dimensional approach (i.e., how individual parenting dimensions affect outcome variables) and the typological approach (i.e., how parenting dimensions are combined to form styles that influence outcome variables). Despite the countless number of labels that have been used over the years, three core parenting dimensions have emerged from the literature, namely parental acceptance versus rejection, firm control versus lax control, and psychological autonomy versus psychological control. The study of these dimensions can be approached from either a dimensional bipolar perspective (i.e., core dimensions of parenting represent opposite poles on a continuum) or a unipolar perspective (i.e., each core dimension of parenting represents its own continuum). As the current research study is interested in determining the influence of each individual parenting dimension on bullying, a dimensional bipolar approach to the study of parenting was adopted.

Inconsistencies exist regarding the direction of effects between parents and children. Whereas some researchers support a parent effects model, others claim that child or interactional effects are dominant during the period of preadolescence. Regardless of which model is dominant, parenting behaviour still exerts a significant influence on preadolescent developmental outcomes. Therefore, parent interventions may prove valuable in improving unwanted preadolescent behaviour. Concerning the role of gender in child and adolescent

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

developmental outcomes, two perspectives have emerged in the literature: the differential exposure perspective (i.e., gender differences in bullying result from parents treating boys and girls differently) and the susceptibility perspective (i.e., the same parenting behaviour has different effects on boys and girls). Similarly, the role of ethnicity in the association between parenting dimensions and preadolescent behaviour can be understood from two opposing standpoints. These include the ethnic equivalence model (i.e., universalistic perspective on the effects of parenting) and the cultural values model (i.e., the values of a specific culture would determine the type of parental behaviour utilised as well as its effect on adolescent outcomes). However, limited research on the effects of gender and ethnicity on traditional bullying and cyberbullying is reported in literature.

Although it is known that bullying is a complex phenomenon with no single cause, parenting certainly emerges as one of the most consistent risk factors that correlate highly with both traditional bullying and cyberbullying. In general, it would appear that high levels of perceived parental acceptance and psychological autonomy are associated with adolescent well-being, including reduced bullying perpetration and victimisation. With regard to parental firm (behavioural) control, its effect on adolescent outcomes and bullying is dependent on which aspect of control is being measured: When firm control is operationalised as consistent and age-appropriate discipline, limit setting, or monitoring, it appears to have a positive effect on adolescent behaviour. However, when firm control is operationalised as imposed restrictions, strictness, or harsh discipline, it would be associated with poor adolescent developmental outcomes. In the current study, firm control as operationalised by Schaefer (1965b) and Schludermann and Schludermann (1970, 1988) was used, namely that it is the degree to which parents regulate preadolescents' behaviour through direct means such as implementing and enforcing rules.

In terms of measurement, a variety of methods can be used to assess parenting dimensions. Each of these techniques provides a unique perspective on family functioning and presents with its own strengths and disadvantages. As numerous researchers have agreed that children or adolescents' perspectives regarding parenting behaviour may be most accurate and predictive of their adjustment, the current study made use of preadolescent self-reports to measure parenting dimensions. More specifically, the CRPBI-30 questionnaire was used.

Although several studies exist regarding the effects of parenting variables on preadolescent bullying, less is known regarding *how* these variables exert their effect.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Therefore, the next chapter focuses on the parent-child attachment relationship as a possible mechanism through which perceived parenting dimensions influence preadolescents' bullying perpetration and victimisation.

Chapter 5: Attachment

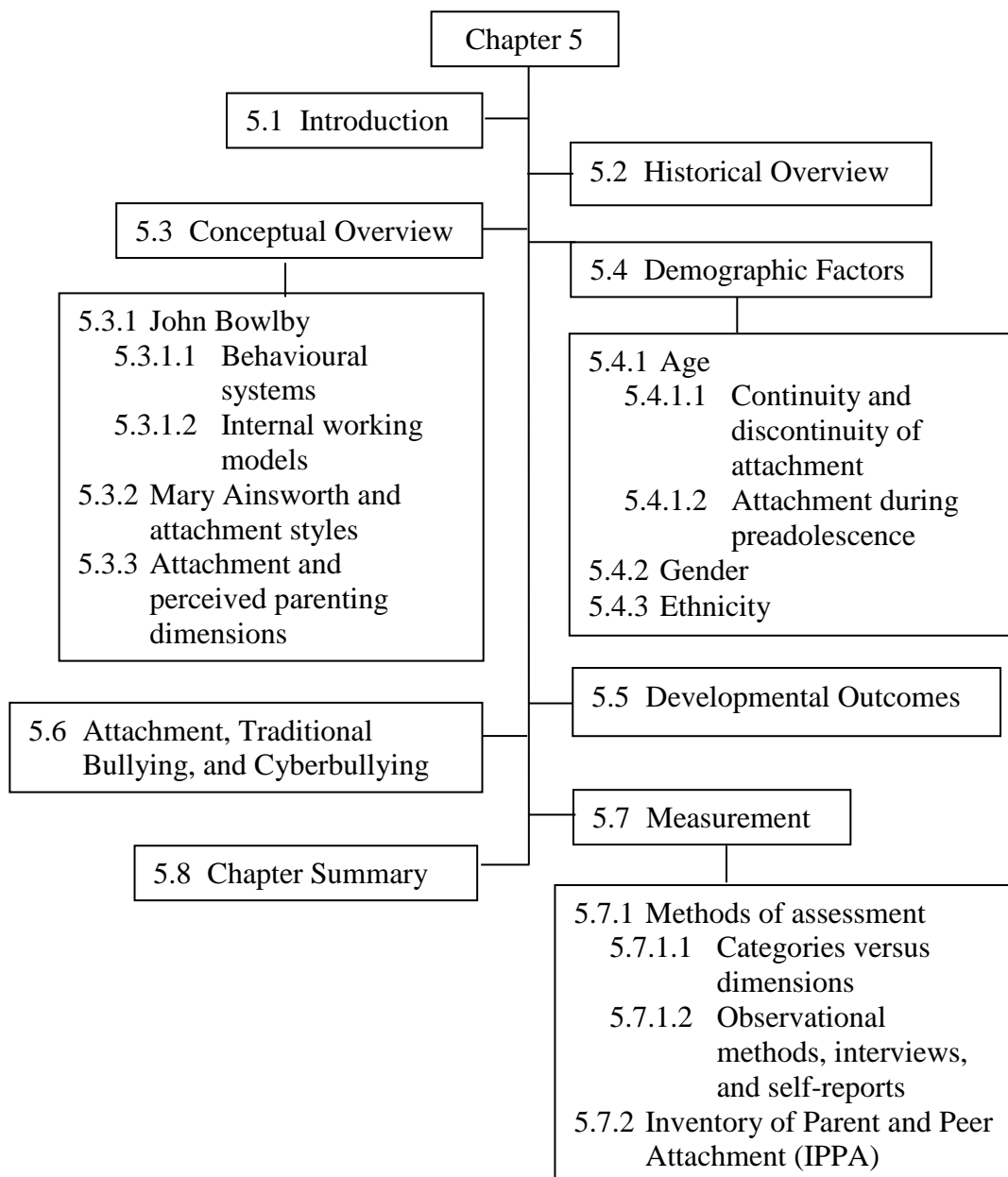


Figure 7. Outline of Chapter 5.

5.1 Introduction

In this chapter, the construct of attachment is discussed in depth. First, a historical overview of how the conceptualisation of attachment has changed over the years is provided. This section begins with Freud's psychoanalytic perspective on attachment, concluding with Bowlby's ethological approach. As this study defines attachment based on the work of Bowlby, a section detailing the concept of attachment according to his perspective (including the contributions made by Ainsworth) is provided. This is followed by a discussion on the relationships between perceived parenting dimensions and attachment. Attention is given to the role of demographic factors in attachment, beginning with the construct of age. Included in this section, is the debate regarding the continuity or change of attachment over time, as well as attachment during preadolescence. Next, the roles of gender and ethnicity are discussed briefly. A discussion on the developmental outcomes of secure and insecure attachment, as well as the associations between attachment and bullying perpetration and victimisation follows. Finally, this chapter concludes with a focus on whether attachment is best measured as categories or dimensions, as well as the different assessment techniques available to measure attachment. Specific reference is made to the Inventory of Parent and Peer Attachment (IPPA) (Armsden & Greenberg, 1987) and the IPPA-R for Children (Gullone & Robinson, 2005). Figure 7 provides a visual summary of the outline of this chapter.

5.2 Historical Overview

Although the importance of early parent-child relationships and their influence on personality development has long been recognised in the field of psychology, many controversies exist regarding the dynamics underlying and promoting such relationships (Bowlby, 1958). Initial theories regarding parent-child attachment, such as that proposed by Sigmund and Anna Freud (in Bowlby, 1958), emphasise that a baby becomes attached to the caregiver (specifically the mother) because she satisfies the baby's physiological needs for food and warmth. In this manner, the caregiver subsequently stimulates the baby's erotogenic zones. Thus, babies learn that their caregiver is the source for gratifying all their needs. In other words, this viewpoint advocates that the parent-child bond develops through the process of feeding, in which satisfaction of oral needs is seen as primary and attachment as derived (Bretherton, 1992). Extending this theory, Melanie Klein (Klein, 1952/1997a) later noted that even though the oral component plays the dominant part in the relationship between an infant

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

and a caregiver, gratifying the infant's needs is in fact related to both the food and the object providing the food. Klein (1952/1997a) argues that infants instinctively relate to the human breast and orally possess it, but over time, they learn that attached to the breast is a caregiver, to whom they also relate. In fact, she states that there is something more than merely the satisfaction of their biological drives in infants' bond to their mothers. Therefore, the parent-child attachment relationship was viewed as consisting of more than one component instinct. In her later writings, Klein (1957/1997b) clarified this stance by claiming that the underlying dynamic in the parent-child bond appears to be a combination of babies' need to suck the breast, along with their longing to return to a prenatal state of unity with the mother (i.e., returning to the womb).

However, Bowlby (1958) notes that the complexity of the parent-child attachment relationship gave rise to doubts and conflicting statements, even in the best-established theories. For example, he notes that at one stage, Freud expressed an opinion that greatly differed from any of his previous explanations, namely that infants' development follows the same path whether they were fed by breast, or were deprived of their mother's tender care by being brought up on a bottle. In addition, Bowlby (1958) noted that theorists such as Benedek, Sullivan, and Fairbairn also appeared to display some doubt regarding the absolute oral nature of the mother-child bond, and started exploring the notion that infants may in fact have a need for emotional contact and human relationships. Similarly, theorists such as Michael and Alice Balint, Winnicott, and Suttie (in Bowlby, 1958) started formulating alternative views that removed food as the primary focus of the mother-child relationship, and instead started emphasising non-oral components of the attachment bond. These emerging ideas included the view that infants are active (as opposed to passive) in the mother-child relationship, that the mother-child bond is not related to any of the erogenous zones, that a mother's breast represents both the actual flesh and the whole technique of mothering, and that infants' needs for company and affection are independent of their physiological needs (Bowlby, 1958).

Similar to these psychoanalysts, theorists from other disciplines also debate the function of an individual's social needs. Whereas learning theorists regard the need for social interaction as secondary and merely the result of satisfaction of physiological needs, ethologists argue that this social need and its responses (e.g., clinging and following) serve a specific purpose (i.e., forming a bond) that is independent from other inherent needs (Bowlby, 1958). Perhaps the most prominent figures in support of the latter view are John Bowlby and Mary Ainsworth (Ainsworth & Bowlby, 1991). Instead of viewing infants as needy and

dependent, these theorists believe that infants are curious and fully engaged with their caregivers. Additionally, they emphasise that parent-child relationships promote infant social interaction by aiding exploratory behaviour and competence. In so doing, the theory of attachment subsequently emerged from the joint (yet independent) work of these theorists. For both Bowlby and Ainsworth, psychoanalytic explanations could not account adequately for what they observed during their assessments. Attachment theory thus served as an alternative perspective to psychoanalytic theory in explaining how human relations develop, the functions of parent-child relations, why young children experience anxiety when separated from their caregivers, the processes of loss and mourning, and how social behaviour during infancy influences personality development (Bowlby, 1958, 1988).

Historically, attachment theory has its roots in a number of different disciplines; including evolutionary biology, developmental, social, and cognitive psychology, psychoanalysis, information processing theory, and systems theory (Bretherton, 1992). Thus, it can be regarded as eclectic in nature. In essence, however, it is an ethological approach (i.e., interpreting behaviour in an evolutionary context) to personality development—advocated by Bowlby and Ainsworth—that clinicians and researchers alike rejected initially. In the sections to follow, the contributions that these two researchers made to the field of attachment are clarified.

5.3 Conceptual Overview

5.3.1 John Bowlby

5.3.1.1 Behavioural systems. Through his work with maladjusted children, Bowlby came to emphasise the importance of early interactions between children and their caregivers (mostly mothers). He believed that external family events, as opposed to the then widely held Kleinian beliefs of internal fantasies and conflicts, in fact were the cause of emotional problems in children (Bretherton, 1992). Thus, Bowlby chose to focus on the effect that early separation from the mother would have on the child. Subsequently, he came to believe that to thrive emotionally, “the infant and young child should experience a warm, intimate, and continuous relationship with his mother (or permanent mother-substitute) in which both find satisfaction and enjoyment” (Bowlby, 1969, p. xxvii). Such findings were interpreted by making use of evidence from ethology in how a social bond can be formed without relying on oral gratification. Replacing Freud’s instinctual drive theory, attachment theory postulates that

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

every organism possesses several behavioural systems (e.g., attachment, caregiving, and sexual mating); each intended to achieve a certain goal (Bowlby, 1988). Although these systems are regarded as conceptually distinct, Bowlby also notes that each of these systems contributes in some way to the survival of individuals or their children. Each system comprises various behaviours serving the same function. In the attachment system, for example, crying, sucking, smiling, clinging, and following of children all function as signalling and contact-seeking behaviour (occurring independently from any other satisfactions), with the purpose of increasing proximity with the primary caregiver (Bowlby, 1958). Behavioural systems are activated in certain conditions and will persist until the set goal has been accomplished, after which the system is terminated. For example, the set goal in the attachment system is physical or psychological proximity, thus may be activated under conditions of a “mother's departure or by anything frightening, and the stimuli that most effectively terminate the systems are sound, sight, or touch of mother” (Bowlby, 1969, p. 179). Therefore, a child's attachment to the caregiver is the result of these various proximity-enhancing behaviours directed towards another individual who is perceived as possessing superior coping skills, thus better ensuring child physical and psychological survival (Bowlby, 1988). Any real or even perceived threat may activate the attachment system to seek and maintain close proximity to the attachment figure, allowing the infant to use the caregiver as a haven of safety during times of distress. In the absence of any threats, the attachment system facilitates exploration by serving as a secure base allowing infants, children, and adolescents to explore the environment; consequently, it permits them to learn and develop skills needed for self-protection. On return, these children feel confident that their caregivers will welcome them, provide physical and emotional nourishment, and comfort them if they feel distressed, thereby giving the child a strong sense of security (Bowlby, 1988). By serving as a secure base, the caregiver enables child autonomy and self-reliance (Bretherton, 1992). Everything considered, it is clear that the attachment relationship has three features (or functions) that distinguish it from other forms of social relationships, namely maintenance of proximity (i.e., staying close to, and resisting separations from the attachment figure), safe haven (i.e., turning to the caregiver for comfort and reassurance), and secure base (i.e., using the caregiver as a base from which to learn and explore) (Hazan & Shaver, 1994).

5.3.1.2 Internal working models. The attachment behavioural system tends to be regulated by social input from the primary caregiver during times of infant distress. Regular parent-child interactions allow infants to learn what to expect from these social exchanges and

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

how they should adjust their behaviour accordingly (Hazan & Shaver, 1994). Furthermore, infants learn through the attachment relationship that other people can see when the infant has a need, will respond to this need, and that the infant's behaviour has an influence on others. From these expectations, infants develop internal working models that are mental representations of the self (i.e., organismic model) and the caregiver (i.e., environmental model) allowing infants to predict future behaviour by caregivers and thereby plan their own responses (Bowlby, 1969, 1973, 1988). More specifically, these models refer to whether or not the self is regarded as the type of person towards whom people (particularly the attachment figure) will respond in a helpful manner (i.e., their own worthiness of love), and the degree to which the attachment figure is available and responsive during times of stress (Bowlby, 1973). These models are complementary: Beliefs about the self are determined (partially) by whether or not the caregiver is appraised as responsive to an individual's need for security (Bowlby, 1973; Hazan & Shaver, 1994). Thus, if a caregiver has been responsive to a child's needs for protection and exploration, the child will construct an internal working model of the self as valued and competent. Caregivers who do not acknowledge a child's needs for comfort or exploration will cause the child to develop an internal working model of the self as unworthy (Bretherton, 1992). Bowlby (1969) outlined several requirements for such working models to be useful and accurate in their predictions, including that these models need to be constructed from available data and continuously updated, that they need to be extended (imaginatively) to be able to cover all potential realities to be used in unfamiliar situations, and that they need to be tested for internal consistency.

By allowing an individual to imagine interactions with others (based on previous social experiences), these internal working models assist individuals to anticipate, interpret, and guide their behaviour and affect in interpersonal interactions (Bowlby, 1973). In other words, early attachment relationships are internalised by infants and form the blueprint for how an individual enters and maintains future interactions with others. These internal working models are believed to be self-perpetuating, thus maintaining individuals' attachment styles over time until they themselves may become parents (Bretherton, 1992). These internal working models can then influence how individuals act as attachment figures for their own children, which in turn determines the type of attachment styles developed by their children (i.e., cross-generational effects). The concept of internal working models and the potential for cross-generational effects paved the way for the notion of helping children by helping their parents. As with research on parenting behaviour, attachment theory is concerned mostly with the

child's perspective of the attachment relationship, as internal working models are constructed from children's experiences with their parents (Cowan & Cowan, 2007).

5.3.2 Mary Ainsworth and attachment styles. The contributions made by Ainsworth served to extend Bowlby's original theory (Ainsworth & Bowlby, 1991). Through her empirical investigations, she was able to test and validate Bowlby's ethological notions. She observed the development of mother-child attachment in several families and documented differences in the quality of these interactions. Thereafter, Ainsworth related the interactive patterns observed during the first three months of an infant's life to his or her behaviour in a now widely recognised laboratory procedure known as the Strange Situation (Bretherton, 1992). This procedure serves as a relatively quick method of assessing an individual's attachment style (i.e., the manner in which an individual would respond typically in attachment-relevant situations). It activates an infant's attachment system (through repeated separations from the primary caregiver), while simultaneously allowing the attachment figure to act as a secure base. Additionally, the presence of appealing toys was also meant to activate the exploration system (Hazan & Shaver, 1994). Through observation, this procedure aimed at evaluating proximity-seeking, safe haven, and secure base behaviour (i.e., whether infants remained close to, and desired contact from their caregivers, and if exploratory behaviour was facilitated by the caregiver's presence) (Ainsworth, Blehar, Waters, & Wall, 1978/2014). Such observations were also meant to reflect the infant's underlying internal working models of the self and the attachment figure, representing the caregiver as either consistently responsive, consistently unresponsive, or inconsistent (Hazan & Shaver, 1994; Pietromonaco & Barrett, 2000).

Ainsworth identified three patterns of infant attachment as she observed the various types of caregiver responsiveness: securely attached, insecurely attached, and non-attached infants (Ainsworth et al., 1978/2014). Securely attached infants had mothers who were highly sensitive to their babies' proximity seeking signals and behaviours and who promptly, consistently, and appropriately responded to such signals, especially during the first few months of the infant's life. In the laboratory experiment, securely attached infants seldom cried unless their mothers were absent or were about to leave, but greeted their mothers positively upon their return (Ainsworth & Bowlby, 1991). These infants reacted positively when comforted, and as long as their caregivers were present, seemed comfortable using them as a secure base from which they could explore their environment. During times of insecurity, these infants would return to their attachment figures (i.e., safe haven). In contrast, infants

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

who were insecurely attached to their mothers rarely explored their environments, and frequently cried, even if held by their mothers (Bretherton, 1992). Mothers of insecurely attached infants would either be inconsistent in their displays of responsiveness toward infant signals of contact (sometimes being available and nurturing, but rejecting their infants at other times), or completely ignored any signs of infant requests for comfort. These forms of caregiver behaviour respectively lead to two patterns of insecure attachment (Ainsworth & Bowlby, 1991). Firstly, anxious/ambivalent infants appeared angry upon the mother's return after separation. Even though the crying behaviour of these infants signalled their desire for contact, they could not be comforted when the mother did in fact provide them with contact. Instead, they reacted ambivalently by acting aggressively towards her. These infants were preoccupied with their mothers to the extent that it interfered with their exploratory behaviour. The second group of insecurely attached infants can be classified as avoidant, referring to infants who appeared indifferent to their mother's departure, with subsequent avoidance when the mother returned. Instead, they would keep their attention fixated on the toys. Finally, non-attached infants did not display any differentiated behaviour toward their mothers.

Later, researchers in the field of attachment identified yet another category of attachment, namely the disorganised attachment style (Main & Solomon, 1990). This style of attachment is often regarded as a mixture of behavioural responses from the anxious/ambivalent and avoidant styles. It is more often found in poverty-stricken areas, as such conditions may prevent optimal parenting, which consequently inhibits the development of secure, or even "organised" patterns of insecure attachment (i.e., anxious/ambivalent and avoidant) (Shaver & Mikulincer, 2010). Furthermore, infants of caregivers who suffer from a psychological disturbance (e.g., depression) or who are abusive are also at risk for developing this style of attachment (Hazan & Shaver, 1994). The existence of these three insecure attachment styles further validate Bowlby's main assumption that an infant needs to form an attachment with the primary caregiver for survival purposes, despite inadequate emotional responsiveness from the parent.

The discussion above demonstrates the basic premise of attachment theory, namely that a child's quality of attachment develops largely as a function of parenting behaviour (Bowlby, 1973). This association between parenting and attachment is explored in more detail in the next section.

5.3.3 Attachment and perceived parenting dimensions. Although attachment and perceived dimensions of parenting conceptually are closely related constructs, they can still be regarded as two distinct family factors that each contributes to child and adolescent development outcomes (Güngör & Bornstein, 2010). Parenting behaviour that is perceived as accepting and responsive fosters the development of secure parent-child attachment relationships in which infants learn that they can trust and rely on a caregiver (i.e., positive internal working models of self and others) (Ainsworth et al., 1978/2014). In contrast, infants of rejecting or inconsistent parenting develop insecure parent-child attachment bonds (i.e., negative internal working models of self and others). During preadolescence and adolescence, changes in parental behaviour occur (Kerns, Brumariu, & Seibert, 2011). These changes result from adolescents needing to balance achieving independence with maintaining a sense of relatedness to their parents (Sheehan & Noller, 2002). Therefore, parents and preadolescents need to renegotiate autonomy, as well as their roles in the relationship. Whereas preadolescents who are securely attached are successful in these negotiations, insecure attachment instead interferes with the preadolescent's ability to balance autonomy-seeking behaviour with connectedness (Karavasilis, Doyle, & Markiewicz, 2003). Owing to the relative malleability of parent-child attachment relationships (Bowlby, 1973), it becomes critical to identify the parenting dimensions, as well as the extent to which they continue to influence the quality of parent-child attachment beyond infancy. Resulting from the renegotiation of roles and boundaries in the parent-child relationship, certain parenting dimensions may become more significant, whereas others decrease in importance for preadolescent and adolescent attachment security (Karavasilis et al., 2003).

Firstly, the parenting dimension most often associated with attachment security is perceived parental warmth or acceptance. Numerous studies confirm that parental warmth or acceptance remain significant in determining attachment security in preadolescence and adolescence (e.g., Gallarin & Alonso-Arbiol, 2012; Kerns et al., 2011; Mothander & Wang, 2014). Thus, supportive parenting behaviour that communicates acceptance of and responsiveness to an adolescent's needs facilitates the development of positive internal working models, in which the self is represented as loveable and others are viewed as trustworthy. This confidence that an attachment figure will be available and responsive during times of distress (i.e., secure base) would enable a preadolescent further to explore extra-familial situations and relationships, thereby aiding the normative process of autonomy and individuation (Karavasilis et al., 2003). At the same time, however, parental warmth would

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

serve to protect preadolescents from prematurely relying on peers to fulfil attachment needs (Kobak, Rosenthal, Zajac, & Madsen, 2007).

The limited studies conducted on parenting and attachment in middle childhood and preadolescence have mostly examined parental warmth; therefore, little is known about how dimensions of parental control are related to attachment (Kerns et al., 2011). These parental control dimensions (i.e., behavioural and psychological control) play an important role in encouraging age-appropriate environmental exploration to assist a preadolescent to develop as an individual separate of his family. The importance of these parenting dimensions is illustrated in studies such as that conducted by Karavasilis et al. (2003), who demonstrated that despite the presence of warm parental involvement and acceptance, parents who discouraged their adolescent's psychological autonomy and failed to provide appropriate monitoring and limit-setting led to these adolescents developing insecure attachment styles. Thus, the second parenting dimension that may be relevant particularly during later stages of development is that of behavioural or firm control as preadolescents become more independent and encounter new and potentially harmful experiences outside the family context (Karavasilis et al., 2003). However, owing to a preadolescent's seeking of autonomy, it would also be expected that secure adolescent attachment would result from parenting that is not overly controlling (Kerns et al., 2011). Owing to the variety of ways in which control has been conceptualised, there have been mixed results regarding the role of control in adolescent attachment security. For example, when behavioural control is conceptualised as negative or harsh control (i.e., involving strict disciplinary techniques), an indirect relationship is found between control and attachment security (Bosmans et al., 2006; Scott et al., 2013). Such negative parenting behaviour may interfere with adolescents' perceptions of their parent as a source of comfort and consequently interrupt their use of the caregiver as a secure base and safe haven (Scott et al., 2013). Furthermore, it is also expected that parenting that is perceived to be too strict with too many rules or harsh discipline may limit a preadolescent's opportunities to explore the environment autonomously and develop as an independent individual. Conversely, control that has been conceptualised as parental monitoring has been associated positively with preadolescent and adolescent security of attachment (Dane et al., 2012; Kerns, Aspelmeier, Gentzler, & Grabill, 2001; Scott, Briskman, Woolgar, Humayun, & O'Connor, 2011). It has been suggested that parental monitoring may provide a preadolescent with reassurance that the attachment figure is available and interested in the preadolescent's life, thereby promoting security of attachment

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

(Kerns et al., 2001). Alternatively, secure parent-child attachment relationships may provide the ideal context for adolescents to self-disclose their activities and whereabouts, thus providing parents with more monitoring knowledge (Dane et al., 2012). However, some studies found a negative correlation between behavioural monitoring or control (including limit setting and demands for age-appropriate behaviour) and security of attachment (Karavasilis et al., 2003). Still, other researchers found that acts of parental behavioural control did not contribute significantly to adolescent security of attachment (Cai et al., 2013). As the exact role of perceived parental behavioural control in preadolescent attachment security remains unclear, an important contribution resulting from the current research study was to examine how perceived parental firm control is associated with attachment.

Finally, research regarding the third parenting dimension—psychological control—has provided more consistent findings: Higher perceived parental psychological control, including parental overprotection, is associated with less secure parent-child attachment (Cai et al., 2013; Doyle & Markiewicz, 2005; Kerns et al., 2011). Bowlby (1988) also clearly implicated psychological controlling behaviour such as guilt-inducing techniques and threats of love withdrawal in the development of insecure attachment in children. In contrast, granting of psychological autonomy by parents is related positively to adolescents' attachment security (Karavasilis et al., 2003). According to Soenens and Vansteenkiste (2010), parenting that employs psychological controlling tactics forces adolescents to surrender their aspirations of gaining independence to maintain a sense of relatedness with their parents. As noted by these authors, however, this forced connectedness is unlikely to be perceived as genuine or trustworthy, but rather as fabricated and conditional. Such insecurity of attachment is fostered further by adolescents' doubts if the parent would be available and respond in the case of adolescent distress if they in fact explore realms beyond the parent-child relationship. In other words, adolescents who do not regard their psychological controlling parents to function as a secure base or safe haven would struggle with the normative developmental task of autonomy and individuation.

From the above discussions, it is clear that parenting behaviour continues to influence attachment security even during preadolescence and adolescence. Thus, despite the importance of the quality of early caregiving, later parenting behaviour is just as, if not more significant in determining the quality of parent-child attachment relationships beyond infancy. Next, topics related to the continuity or change in the quality of parent-child attachment, as well as the importance of attachment during preadolescence, are discussed, followed by a

discussion of other demographic factors (i.e., gender and ethnicity) that may alter the quality of attachment.

5.4 Demographic Factors

5.4.1 Age

5.4.1.1 *Continuity and discontinuity of attachment.* Attachment theorists make use of internal working models to explain how childhood attachment behaviour is transferred to other (extra-familial) relationships throughout the life span. These theorists emphasise how internal working models shape and maintain an individual's social environment, how they elicit certain reactions from others, and how these models can influence the processing of social information (Hazan & Shaver, 1994). Whereas children with secure internal working models can initiate warm interactions and relations with others with confidence and positive expectations, children with insecure models tend to demand excessive attention or withdraw from others. Such assumptions have led researchers to use attachment theory and internal working models to explain caregiving and pair bonding (Fraley, 2002). However, the extent to which adult attachment relations are influenced by internal working models (that are based on earlier attachment figures) is unclear (Fraley, 2002; Hazan & Shaver, 1994). Therefore, Fraley (2002) identified two perspectives regarding the degree of long-term attachment stability and its underlying mechanisms, namely the revisionist perspective and the prototype perspective.

According to the revisionist perspective, early internal working models of attachment can be updated to reflect new experiences (Fraley, 2002). If major events (e.g., parental death, changes in employment, and serious illness) alter the quality of the caregiving environment in such a way that children's subsequent interpersonal encounters deviate from their existing expectations, modifications may be made to their models of early attachment experiences. However, this perspective also holds that because individuals exert some degree of influence over the environment (e.g., selecting or creating environments that align with their current expectations), internal working models of early attachment may persevere. Any stability in attachment security thus observed is not due to an intrinsic stable factor, but rather due to continuity in ongoing social experiences. In short, this view on attachment postulates that internal working models are relatively flexible, with the result that both early and concurrent representational models are altered over time. Consequently, infant and adult attachment patterns may or may not necessarily correspond.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

In contrast, the prototype perspective reflects the classic view in attachment theory stating that early attachment representations remain unchanged and serve as a prototype (i.e., template) that influences later working models of parent-child relations and interpersonal dynamics throughout one's life course (Fraley, 2002; Fraley, Vicary, Brumbaugh, & Roisman, 2011). These older working models develop and function independently from the more complex modes of attachment representation that are developed later in childhood. As with the revisionist perspective, the prototype perspective also accepts that attachment patterns may either remain stable (i.e., when individuals seek out environments according to their prototypes) or be modified over time (i.e., when individuals experience events that challenge their expectations). In contrast to the revisionist perspective, however, the prototype perspective emphasises that while the consciously accessible models may be updated or revised with changing circumstances, the older representations (functioning mostly out of awareness) remain unaltered. Therefore, the constant influence of early prototypes on interpersonal environments will make it unlikely for an individual to change substantially. Fraley (2002) further elaborates on this point by explaining how a person's level of attachment security will fluctuate around a set prototype value. He states that if the prototype has a significant influence on the environment, there will be minimal fluctuation. In contrast, if the influence of the prototype is small, the degree of fluctuation will be large. Examples of situations in which the influence of the prototype is minimised include that of poverty, abuse, and relational discord. These statements largely reflect the analogy made by Bowlby (1973) when he compared personality development to that of a railway system, describing how people have an enduring tendency to remain fairly close to their original routes despite the various branches and junctures afforded along the way. In other words, if there were any changes in the working models and levels of security, these changes will be only temporary, and eventually, individuals will return to a security level consistent with their prototypical value (Fraley et al., 2011).

Thus, even though attachment theory does not claim absolute stability of early internal working models, it does state that these models become increasingly resistant to change because (a) they operate largely out of awareness, (b) the quality of interactions between people in a specific relationship gradually function out of awareness as they become habitual and automatic, and (c) because these models direct an individual's attention to and create interpretations of social or environmental information that is consistent with that person's representations (Bowlby, 1973, 1980; Hazan & Shaver, 1994; Pietromonaco & Barrett, 2000).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Therefore, as parent-child interactions become increasingly automated, the conscious revision of internal working models decreases. For enduring change to happen in an individual's attachment security, there needs to be a consistent and stable external or internal influence to counteract the influence of the existing prototype (Fraley, 2002). When short-term influences are incorporated, individuals will naturally return to their set value of security.

Studies were able to determine that the model that fits the data best was in fact the prototype perspective, thereby confirming that long-term attachment stability over the life span is explained best by prototype-like processes (Fraley et al., 2011; Fraley, 2002). More specifically, this prototype model predicted that the continuity between early and later attachment security would correspond to a correlation of approximately 0.39 (Fraley, 2002). In fact, Bowlby (1973) originally stated that adult internal working models are updated throughout one's life and are influenced or moderated by a wide range of factors (e.g., current life circumstances and relationships). Thus, the prototype perspective holds that attachment security at any point in time is the result of a stable latent factor (i.e., early prototype-based interactions with the caregiver) and subsequent experiences that have been accumulated thereafter (Fraley et al., 2011).

Research within the field of neurobiology may also provide some insights regarding the influence of early attachment relationships and internal working models. According to this perspective, both the quality of parental care and the caregiving environment influence a parent's ability to regulate an infant's brain, physiology, and behaviour (Perry, Blair, & Sullivan, 2017). More specifically, the quality of parental care regulates, amongst others, amygdala and stress reactivity (i.e. hypothalamus-pituitary-adrenal axis as well as parasympathetic nervous system reactivity), the level of stress hormones, hippocampal development, dopaminergic and oxytocinergic systems, as well as the programming of brain areas underlying emotion (Debbané et al., 2016; Feldman, 2017; Perry et al., 2017). Poor parent-child interactions would, for example, activate the neurobiological stress axis, thereby resulting in a constant state of stress experienced at a neural level, giving rise to associate behaviour. As these occur during a sensitive period of childhood development (Feldman, 2017), these states become traits, embedded within the core structure of the brain (Schoore, 2002). Collectively, these physiological and neurological changes impact the quality of the parent-child attachment relationship. The resulting internal working models of this attachment relationship are stored in the implicit-procedural memory system (Bowlby, 1969). In turn, the quality of attachment further affects brain structure and function into childhood. The ways in

which neural pathways are shaped and strengthened thus appear to depend on both genes and repeated experiences with one's caregivers (Fishbane, 2007). In other words, exposure to repetitive early events result in the formation of strong synaptic connections that represent an adaptation that has become hard wired into neural circuits. The resulting attachment relationships in turn shape an individual's patterns of responsiveness and emotional regulation in later stages of development (Perry et al., 2017; Schore, 2002). According to Fishbane (2007), "the kind of parenting we receive as children, the nature of our relationships throughout life, and the experience of therapy" (pp. 396), can all mould the brain by modifying the synaptic connections and circuits; thereby illustrating neural plasticity. It is because of the plastic nature of the brain that later attachment relationships can partly reorganize and repair neural networks resulting from early negative experiences (Feldman, 2017). However, the extent to which these already-existing neural connections can be changed is a topic of debate. Thus, although positive behavioural changes can be observed in individuals with a history of poor attachment relationships, the extent to which these individuals can recover neurologically has not yet been confirmed (Fishbane, 2007).

A more recent meta-analysis conducted by Pinquart, Feußner, and Ahnert (2013) reflects only a weak stability in long-term attachment security from infancy to adulthood, thereby supporting a revisionist perspective. However, the scopes of the two meta-analyses respectively conducted by Fraley (2002) and Pinquart et al. (2013) focused on studies that assessed adult attachment in different ways. Thus, it is unclear whether these conflicting findings are merely the result of differences in scope. Consequently, the degree of stability of internal working models over time remains an open question.

5.4.1.2 Attachment during preadolescence. Despite the fact that both Bowlby and Ainsworth believe that attachment theory applies across the life span, relatively little research has been conducted in age groups beyond infancy and early childhood (Shaver & Mikulincer, 2010). In fact, middle childhood and preadolescence are probably the developmental periods most neglected by attachment researchers (Bosmans & Kerns, 2015). As children approach preadolescence and adolescence, diversification and differentiation occur in the attachment system as children's social world develops to include peers, social groups, and romantic partners (Gorrese & Ruggieri, 2012).

According to Bowlby (1969, 1988), the attachment system becomes activated less easily as children age and proximity to the mother becomes less urgent. In fact, as children reach

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

adolescence and adulthood, they venture further away from their secure base (primary caregiver) for longer periods, and there may even be changes towards whom the attachment behaviour is directed. Instead of shifting at the same time, attachment functions are believed to be transferred individually from one attachment figure to the next (e.g., from parents to peers) (Hazan & Shaver, 1994). In this way, parents as the primary attachment figures are relinquished slowly so that a child's attachment relationships are broadened to include peers. It is hypothesised that this process begins with the transfer of proximity seeking during early childhood (i.e., children spend more time with peers than with parents), followed by safe-haven behaviour (i.e., support seeking) during middle childhood and early adolescence. That is, as children spend more time with peers, a context is created that promotes safe-haven behaviour (Hazan & Shaver, 1994). Only in late adolescence, secure-base functions are transferred from parents to peers or romantic partners, resulting in the latter two becoming the primary attachment figures by adulthood (Kobak et al., 2007).

Providing evidence for this transfer of attachment functions, Nickerson and Nagle (2005) found that as children progressed from fourth- to sixth grade, they reported less trust and communication with their parents. Gullone and Robinson (2005) also found that their child sample (ages 9-11) scored significantly higher on parent attachment relative to the adolescent sample (ages 14-15). Similarly, results from a studies conducted by Tambelli, Laghi, Odorisio, and Notari (2012) as well as Jiang et al. (2013) indicate a progressive, age-related decline in the quality of the parent-child attachment relationship, but an increase in the quality of peer attachment relationships. In addition, preadolescents and adolescents would more frequently turn to peers to fulfil attachment needs of proximity seeking and safe haven as compared to children in middle childhood.

According to Bowlby (1973), the actual presence or absence of the attachment figure serves as the main factor in determining whether a young child would become upset in potentially alarming situations. Among older children (especially adolescents after puberty), however, the major factor is not the physical presence or absence of the attachment figure, but rather the confidence (or lack thereof) that the attachment figure will be available and responsive if the need for comfort arises. In other words, the goal of the attachment system changes with increasing age from seeking frequent and intense proximity to symbolic communication (e.g., phone calls) in providing comfort regarding the availability of the attachment figure (Armsden & Greenberg, 1987; Benson, McWey, & Ross, 2006). Towards the end of preadolescence, the parent-child attachment relationship can be regarded as a

collaborative alliance—the child is still dependent on the primary attachment figure in addition to using the parent as a resource (Bosmans & Kerns, 2015).

Despite this transfer, peers do not replace parents completely as attachment figures; especially not during middle childhood and preadolescence, as the transition process may still be incomplete (Gorrese & Ruggieri, 2012; Scharf & Mayseless, 2007). Instead, a parent's position in the hierarchy of attachment figures, relative to that of peers, simply changes as children grow older, until they are replaced by a romantic partner during adulthood (Hazan & Shaver, 1994; Kobak et al., 2007). The weakening of the attachment bond with one's parents during adolescence is said to firstly promote self-reliance and individuation (ensuring that adolescents can function independently should their parents not be around), and secondly, to ensure that emotional investment in various sources is made (e.g., the self, friends, non-parental adults, and romantic partners) (Scharf & Mayseless, 2007). Even at a time when preadolescents and adolescents are increasingly becoming autonomous from their parents, several studies demonstrate that parental influence continues to be important and function as a secure base, allowing adolescents to form relationships with peers and romantic partners (Bosmans & Kerns, 2015; Gorrese & Ruggieri, 2012; Tambelli et al., 2012). In fact, a study conducted by Laghi et al. (2016) illustrated that adolescents' attachment to their parents, as compared to peers, was related more strongly to their life satisfaction. Only in situations where parents were not available, when same-aged peers were in a better position to provide advice or support, or in situations that represented lower levels of threat (e.g., problems with teachers or initiating dating relationships), were adolescents more likely to rely on and test peers as possible attachment figures (Kobak et al., 2007). In contrast, parents as the primary attachment figures were used increasingly only in situations appraised to involve high levels of danger or challenge (e.g., serious illness or situations requiring parental expertise such as learning how to drive a car) (Kobak et al., 2007). Thus, in spite of preadolescents' emerging developmental need for independence and that peer relations closely resemble attachment relations in terms of proximity-seeking and safe haven, parents remain the primary attachment figures who function as the secure base in this age group (Bosmans & Kerns, 2015; Nickerson & Nagle, 2005; Scharf & Mayseless, 2007). Indeed, it is often argued that relying on peers to fulfil attachment needs too early may result in poorer developmental outcomes (Bosmans & Kerns, 2015).

5.4.2 Gender. Two lines of research regarding the role of gender in parent-child attachment relationships exist: Firstly, it can be questioned whether there are any differences

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

between males and females in terms of attachment security, and secondly, if gender moderates the associations between parent-child attachment and child developmental outcomes (McElhaney, Allen, Stephenson, & Hare, 2009). Research findings on both these matters appear somewhat inconsistent.

As it is often argued that there are no evolutionary reasons for attachment differences to exist between infants of different genders (Doyle, Lawford, & Markiewicz, 2009), many studies examining attachment processes in adolescence do not even address the topic of gender. However, the majority of studies that did investigate gender effects found no significant differences in parent-child attachment between males and females (Borelli, David, Crowley, & Mayes, 2010; Ma & Huebner, 2008; McElhaney et al., 2009; You et al., 2015). Such findings suggest that preadolescent and adolescent males and females feel connected to their parents to a similar degree. However, studies in which gender differences were evident were more likely to find that girls displayed stronger attachment to their parents compared to boys (Fanti & Georgiou, 2013; Mothander & Wang, 2014; Tambelli et al., 2012). Scharf and Mayseless (2007) suggest that, as girls reach middle childhood and adolescence and define their identities through connectedness (as opposed to boys who define their identities through separation and independence), they might not possess as strong a need to distance from and reduce emotional investment in parents. Hence, they would experience stronger parent-child attachment bonds.

An evolutionary model proposed by Del Giudice (2009) attempted to explain gender differences in typologies of organised insecure attachment. According to this model, gender differences in attachment may begin to emerge in middle childhood when the endocrine (i.e., hormonal) mechanisms undergo reorganisation. These processes trigger gender-specific adaptive trajectories for attachment, preparing the child for the gender-specific psychosocial reproductive strategies used in early adulthood for mating and parenting. Thus, insecure girls are more likely to show patterns of anxious/ambivalent attachment (to increase proximity and support from family), whereas insecure boys tend to display avoidance, which will assist them in gaining status in same-sex peer groups through traits such as aggression and competitiveness. Findings from a number of studies have provided support for this gender-specific classification for insecure attachment (e.g., Gloger-Tippelt & Kappler, 2016; Kerns et al., 2011). However, it appears that gender differences in attachment might be linked instead to the measurement technique used for assessment, thus warranting further research (Kerns et al., 2011). Studies such as that conducted by Li, He, and Li (2009) found no gender

differences in insecure attachment patterns; therefore, these authors propose that differences in attachment across genders are not universal, but rather culture-specific—a topic that is discussed in Section 5.4.3.

With regard to the moderating effects of gender, the majority of studies found no evidence that relationships between attachment security and adolescent developmental outcomes varied across genders (Hoeve et al., 2012; Mattanah, Lopez, & Govern, 2011; McElhaney et al., 2009; Scott et al., 2011). In other words, parental attachment relationships are equally important for adjustment in both male and female adolescents. However, some studies found that gender moderated the attachment-adjustment link in adolescents (e.g., Fearon, Bakermans-Kranenburg, Van Ijzendoorn, Lapsley, & Roisman, 2010; You et al., 2015). However, the gender for which attachment is related to optimal or poorer adolescent outcomes remains an open question. The result possibly depends on the type of outcome being assessed. As adolescent females value close family relationships, they might find it more difficult to achieve autonomy compared to adolescent males, who instead are struggling to function independently (as expected by society) without experiencing a sense of isolation (Mattanah et al., 2011). Consequently, secure parental attachment relationships could aid females in domains such as self-assertiveness, whereas these relationships would instead be beneficial to males in domains of interpersonal competence (including less problematic externalising behaviour).

5.4.3 Ethnicity. As with research on gender, limited studies have attempted to investigate the effect of ethnicity on attachment processes. As studies on attachment reported in literature have predominantly used white Western participants, it is unclear whether principles from attachment theory can be applied universally, or if cultural differences (e.g., individualism versus collectivism) will produce differences in patterns of attachment (Fitton, 2012; Pearson & Child, 2007).

According to Van Ijzendoorn and Sagi-Schwartz (2008), there are four core hypotheses of attachment theory that, if proven, would provide support for the universal application of attachment theory. These hypotheses include that (a) all infants will attach to an attachment figure (universality), (b) secure attachment is normative (normativity), (c) secure attachment depends on sensitive and responsive caregiving (sensitivity), and (d) secure attachment is related to positive developmental outcomes (competence). Consequently, cross-cultural research aims to determine whether these hypotheses are upheld in various ethnic groups, to

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

establish whether attachment theory is universal or culture-specific. Several researchers have found support for one or more of these hypotheses (Cai et al., 2013; Dexter, Wong, Stacks, Beeghly, & Barnett, 2013; Jin, Jacobvitz, Hazen, & Jung, 2012; Mattanah et al., 2011; McElhaney et al., 2009; Tomlinson, Cooper, & Murray, 2005). Such findings imply that the results of attachment studies utilising white Western participants can be generalised to other cultures.

Although the three basic patterns of attachment (i.e., secure, anxious/ambivalent, and avoidant) are present in all cultures with secure attachment being predominant (Van Ijzendoorn & Sagi-Schwartz, 2008), cross-cultural variation seems to exist with regard to the frequency and distribution of insecure styles of attachment (Kerns et al., 2011; Williams & Kennedy, 2012). It has been suggested that such variation might be related to differences in parenting across ethnic groups. For example, collectivistic cultures (valuing interpersonal relations and proximity-seeking over exploration) may be more likely to foster anxious/ambivalent attachment patterns (i.e., maximisation of attachment behaviour). In contrast, individualistic cultures may instead promote the development of avoidant attachment, as autonomy and exploration are emphasised, thus minimising attachment behaviour (Cowan & Cowan, 2007; Jin et al., 2012). Alternatively, different rates of secure and insecure attachment patterns across ethnic groups could be attributed to assessment measures (e.g., the Strange Situation procedure) that may be culturally insensitive, with the result that infants are classified incorrectly (Jin et al., 2012). It has been suggested that even though the functions of attachment (i.e., proximity seeking, secure base, and safe haven) are universal, cultural variations in how parents and infants achieve these functions may exist (Jin et al., 2012). In other words, what constitutes “sensitive parenting” and how children communicate their attachment needs may differ depending on the cultural context (Cowan & Cowan, 2007). Therefore, in-depth knowledge and culturally sensitive instruments are required to be able to detect such variations and assign infants to the correct attachment categories.

Finally, other factors often inherent in certain cultural groups (e.g., socioeconomic status) may also affect the frequency of attachment patterns. For example, a South African study conducted by Tomlinson et al. (2005) found higher rates of infant disorganised attachment in a low-income Xhosa sample, as compared to other studies conducted with Western participants. Therefore, although attachment hypotheses and functions may be found in various cultures, the experiences or conditions needed to activate an infant’s attachment

system, as well as how attachment needs are expressed, may differ depending on the cultural context. Therefore, more research regarding how ethnicity alters expressions and patterns of attachment, including possibly adapting existing measures of attachment, is needed (Borelli et al., 2016).

In the following sections, the psychosocial and behavioural outcomes of attachment security and insecurity are discussed, including how these are related to bullying and cyberbullying.

5.5 Developmental Outcomes

Generally, it is believed that attachment security will promote healthy psychosocial functioning, whereas attachment insecurity will result in a wide range of socioemotional and behavioural difficulties (McElhaney et al., 2009). In fact, studies confirm that higher security of parent-child attachment is related directly to positive constructs such as high self-esteem, life satisfaction, hope, and adaptive emotional regulation strategies (Armsden & Greenberg, 1987; Brumariu, 2015; Jiang et al., 2013; Laghi et al., 2016; Ma & Huebner, 2008). In contrast, insecure attachment is related to externalising (e.g., aggression and delinquency) (Cyr et al., 2014; Fearon et al., 2010; Hovee et al., 2012; Nunes et al., 2013) as well as internalising (e.g., symptoms of anxiety and depression) child and adolescent problems (Kochanska & Kim, 2013; Mashegoane & Ramoloto, 2016; Nunes et al., 2013; Tambelli et al., 2012).

The association between parent-child attachment and mental health outcomes is explained mainly by using the concept of internal working models (Bowlby, 1973). In fact, Bowlby (1969) originally stated that psychopathology could be regarded as the result of inadequate or inaccurate internal working models, possibly because these models are out of date, only half revised, or full of inconsistencies. As internal working models partially comprise views on the responsiveness of others, security of attachment is expected specifically to predict not only one's functioning in social relationships, but also the quality of extra-familial relationships (Gorrese & Ruggieri, 2012; McElhaney et al., 2009). In other words, having a secure relationship with one's parents allows for the development of secure representations and expectations of one's peers, resulting in the creation of high-quality peer relations. In fact, various studies have already confirmed that children with secure attachment relationships with their parents also had secure relationships with their peers and close

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

friends, thus promoting child adjustment (De Goede, Branje, Delsing, & Meeus, 2009; Gorrese & Ruggieri, 2012). Especially during adolescence, individuals are expected to manage increasing demands in peer relations successfully, with the development of such abilities being associated with security of attachment (McElhaney et al., 2009).

Internal working models of attachment have also been hypothesised to influence a child's exploration behaviour, resulting in the development of socioemotional competencies (Booth, Rose-Krasnor, McKinnon, & Rubin, 1994): If children trust that their parents will be available and responsive during times of distress, they will feel self-confident and subsequently explore the social environment. Such exploration will result in peer play and promote the development of social skills. In contrast, insecure parent-child attachment relations will cause children to be wary of social situations. In turn, this will hamper exploration of the environment and diminish opportunities for peer play, thus interfering with the development of social competencies. According to Booth et al. (1994), this chain of events will result in a child interacting either adaptively or maladaptively with others.

Another major hypothesis is that internal working models influence the processing of social information (Crick & Dodge, 1994). According to Bowlby (1973), internal working models "determine what is perceived and what ignored, how a new situation is construed, and what plan of action is likely to be constructed to deal with it" (pp. 368-369). In fact, the internal working model construct has been consistent with general theories of social cognition, which state that people develop internal representations of social experiences (Dykas & Cassidy, 2011). Considered to be one of the dominant frameworks in literature on childhood aggression, the social information processing (SIP) model (Crick & Dodge, 1994) proposes that prosocial behaviour results from accurate processing of social information, while processing of distorted information at any point in the process may result in negative developmental outcomes such as aggressive behaviour (Werner, 2012). Even within the developmental psychopathology framework, the SIP model is acknowledged as a major theoretical perspective for understanding how cognitive factors contribute to aggression (Li, Fraser, & Wike, 2013). According to the SIP model, social information processing proceeds along six steps, namely the encoding of cues, interpretation of cues, goal selection, response search, response decision, and behavioural enactment. Individual differences in these steps of processing social information results from each person's social "database" of memories based on past interpersonal experiences that form one's internal social schemes (Granot & Mayseless, 2012). Crick and Dodge (1994) state that internal working models of attachment

in fact are a significant part of this social database, serving as a latent SIP process that guides the online processing of social information in a peer context. In other words, individuals will make use of stored information from experiences with their attachment figures (i.e., internal working models in their social database) to interpret (via the steps of processing social information) and subsequently act in new interpersonal situations in which little information is available (Dykas & Cassidy, 2011). This multi-level interaction between attachment representations and online cognitive processing only further resonates with the perspective of developmental psychopathology (Li et al., 2013). Thus, by knowing the quality of an individual's internal working models, assumptions can be made regarding how an individual will process social information. Whereas securely attached individuals will utilise positive attachment experience knowledge to process social information in a positively biased manner, individuals with an insecure quality of attachment will display more maladaptive social information processing, filtering and formulating information to be consistent with their negative internal working models (Dykas & Cassidy, 2011; Granot & Mayseless, 2012). A related social cognitive construct is cognitive empathy or theory of mind. Studies have suggested that quality of attachment is associated with development of theory of mind, whereby insecurely attached individuals possess a poorer theory of mind compared to those who were securely attached (Dykas & Cassidy, 2011; Humfress, O'Connor, Slaughter, Target, & Fonagy, 2002). Such findings are interpreted through the assumption that quality of attachment influences the ability to process the thoughts and emotions of others systematically. In turn, theory of mind has important implications for a child's social interactions, communication, and behaviour (Korkmaz, 2011).

Apart from these major theoretical explanations, others have also attempted to explain the association between parent-child attachment and developmental outcomes by referring to the role of moral emotions and values, emotional regulation, caregivers' modelling of social behaviour, and the social modulation of biological systems that mediate regulation of stress and arousal (Fearon et al., 2010).

5.6 Attachment, Traditional Bullying, and Cyberbullying

From the discussions above, it can be seen that attachment theory provides a useful framework for linking parental and peer relationships and interactions. In fact, using attachment concepts to understand the origins and course of behavioural problems and psychopathology has been one of the most prominent themes in developmental

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

psychopathology (Kochanska & Kim, 2013; Nunes et al., 2013). With regard to peer bullying specifically, only a limited number of studies thus far have examined the relationship between parent-child attachment and bullying in children and adolescents (Klomek et al., 2016). Overall, parent-child attachment insecurity (whether categorically measured as an attachment style or continuously on the secure-insecure dimension) is related to higher levels of traditional bullying and cyberbullying involvement as either a perpetrator, victim, or bully-victim (Bayraktar et al., 2015; Klomek et al., 2016; Kõiv, 2012; Lee, 2016; You et al., 2015). Although some studies found that the influence of parent-child attachment on negative behavioural outcomes weakened as children became older (e.g., Hoeve et al., 2012), many studies still support the premise that parents continue to influence adolescent bullying in spite of the normative distancing that occurs in the parent-child relationship (e.g., Eliot & Cornell, 2009; Gallarin & Alonso-Arbiol, 2012). In fact, a study conducted by Klomek et al. (2016) found that adolescents' perception of the quality of maternal attachment is more important than their perception of their clinical diagnosis (e.g., ADHD) in predicting bullying victimisation. Thus, in spite of other contributing risk factors, the quality of the parent-child attachment bond remains a significant factor in determining child and adolescent bullying experiences.

Moreover, some studies have demonstrated a transactional association between the parent-child attachment quality and the bullying perpetration or victimisation of a child. For example, Fanti and Georgiou (2013) found that bullying perpetration in Grade 5 was related negatively to the quality of the parent-child relationship in Grade 6, and that a lower quality of the parent-child relationship in Grade 5 increased the likelihood of bullying in Grade 6. For bullying victimisation, these researchers found a possible positive longitudinal transactional association, in that victimisation in Grade 3 resulted in increases in the quality of parent-child attachment in Grade 5, which in turn increased the risk that the child will experience victimisation in Grade 6. However, Coleman (2003) investigated attachment to parents and bullying victimisation among preadolescents (ages 10 – 12), finding that there was no significant correlation between these two variables. In other words, preadolescents reporting secure attachments to their parents were just as likely to be victimised as compared to learners who were less securely attached. However, the researcher did state that these insignificant results could be attributed to the small sample size (i.e., fewer than 70 participants), which caused the statistical power to be relatively low and only the strongest effects to be detected. More recently, Demanet and Van Houtte (2012) illustrated that in a sample of high school

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

learners, perpetrators of bullying reported levels of parent-child attachment that were as high as those of learners who were not involved in bullying. In contrast, victims (especially bully-victims) demonstrated low levels of parent-child attachment. Monks, Smith, and Swettenham (2005) reported contradictory results, as they found that most preschool victims of bullying were classified as securely attached compared to perpetrators. These researchers hypothesised that bullying victimisation may only be a transient experience during preschool and thus may not be related to security of attachment; with only children classified as insecurely attached being at risk for (later) repeated victimisation. Other studies suggested that parent-child attachment was only related to bullying through a third variable. For example, You et al. (2015) found that maternal attachment was related to lower levels of bullying among male learners, but only via cognitive empathy (i.e., indirect effects). Owing to these conflicting results, the extent to which parent-child attachment relationships are associated with bullying perpetration and victimisation involvement remains unclear.

Research on the associations between parent-child attachment and specific forms of bullying is even scarcer. For example, Williams and Kennedy (2012) found that avoidant and anxious attachment styles were related to physical and relational bullying perpetration and victimisation. However, gender differences were found for the type of behaviour expressed in conjunction with relationships with parents (e.g., whereas female physical bullying perpetration was linked with attachment avoidance to mothers and attachment anxiety to fathers, parent-child attachments did not predict physical bullying perpetration in males). In addition, Hemphill et al. (2015) found that although parent-child attachment served as a protective factor against traditional bullying victimisation, this finding was not replicated for cyberbullying victimisation.

As with other psychosocial outcomes, the development of bullying perpetration and victimisation may be explained through the workings of internal working models guiding the processing of information in social interactions. Although the SIP model was not designed specifically for explaining bullying, Crick and Dodge (1999) argue that as bullying is a form of aggression, this framework could be applied to bullying as well. Whereas it is generally accepted that deficits in the earlier steps of the SIP framework (e.g., hostile attributional biases) are associated with reactive aggression, proactive aggression is rather linked with biases in goal selection, response search, and response decision (Crick & Dodge, 1994; Stoltz et al., 2013). Therefore, it would be expected that perpetrators would display similar deficits in these later SIP steps, as bullying has been considered mostly as a form of proactive

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

aggression (Price & Dodge, 1989). In fact, some studies have supported this proposition that perpetrators experience difficulties in later rather than earlier steps of social information processing (Camodeca, Goossens, Schuengel, & Terwogt, 2003). However, more recent studies found that bullying perpetration may involve both reactive and proactive aggression, while victims of bullying would display only reactive aggression (Camodeca & Goossens, 2005; Ziv et al., 2013). In other words, whereas victims of bullying would attend only to potentially threatening social cues and assign hostile intent in ambiguous situations (Ziv et al., 2013), perpetrators would demonstrate difficulties in earlier as well as later steps in social information processing (i.e., viewing others' intents as aggressive, constructing aggressive responses, and evaluating aggressive responses in a favourable light) (Camodeca & Goossens, 2005; Chaux et al., 2009; Ziv et al., 2013). In other words, perpetrators may or may not misinterpret social cues and others' intentions (deficits in early SIP steps) but nevertheless utilise aggression to achieve their goal, as they also view aggression as an effective and desirable strategy (Eliot & Cornell, 2009).

As with other developmental outcomes, poor cognitive empathy or theory of mind may also predict bullying perpetration and victimisation (Shakoor et al., 2012; Williford et al., 2016). However, these studies stand in contrast to those researchers who instead advocate that perpetrators and victims of bullying demonstrate no biases in their social information processing (e.g., Gini, 2006; Monks et al., 2005), or that perpetrators may even possess a superior theory of mind that they use to their own advantage to achieve desired goals (e.g., Sutton et al., 1999). Such contradictory findings further substantiate the claim that perpetrators and victims of bullying are heterogeneous groups.

As discussed, negative patterns of processing social information may derive from insecure attachment internal working models. Such models will cause children to expect social interactions to be unrewarding and other people to be unresponsive or unavailable. In turn, these negative expectations may cause children and adolescents to interpret ambiguous social information in a hostile manner or find it difficult to process the feeling states of others (i.e., poor theory of mind), subsequently resulting in bullying (Dykas & Cassidy, 2011; Granot & Mayseless, 2012; Shakoor et al., 2012; You et al., 2015). Similarly, the negative views of self and others held by victims may result in selective attendance to threatening social cues, hostile intent attributions, and beliefs regarding themselves as incapable of resolving conflict effectively (Rosen, Milich, & Harris, 2007). In turn, victims may engage in certain behaviour (e.g., reactive aggression and submission) as an attempt to avoid or

eliminate these social threats, enhancing the risk for victimisation. In contrast, secure parent-child attachment relationships could possibly enhance an adolescent's levels of theory of mind through regular reciprocal communication, thus reducing the likelihood of bullying perpetration, as the child understands how others feel (You et al., 2015). Such reciprocal communication in secure parent-child attachment relationships also increase the likelihood that victims will seek parental support and report bullying incidents to their parents, who could then intervene and assist in reducing the frequency and/or effect of bullying (Bosmans, Braet, Heylen, & De Raedt, 2015; Hemphill et al., 2015). Additionally, children with higher-quality parent-child attachment relationships come to value social relationships as a source of comfort and pleasure, and will thus be less likely to bully others, as such behaviour has a negative and counterproductive effect on relationships (Walden & Beran, 2010).

According to Moretti, Dasilva, and Holland (2004), it may be the type of insecure attachment that determines the function and targets of aggressive behaviour. For example, anxious/ambivalent children have developed internal working models of their caregivers as being somewhat inconsistent—being responsive in some situations but rejecting in others. In other words, they have experienced inconsistent unresponsiveness from their parents (Hazan & Shaver, 1994). Consequently, these children may engage in intense efforts (i.e., acting aggressively) to secure the attention of their caregiver; thereby satisfying their fundamental need to experience some form of an emotional bond with another individual (Michiels, Grietens, Onghena, & Kuppens, 2008). Consequently, these expectations and behaviour are transferred to contexts outside of the family, resulting in children who strongly express a need for an emotional connection with others (specifically with potential friends) by adopting extreme behaviour such as being demanding or aggressive.

In contrast, children classified as insecure avoidant (avoidant-fearful in adolescents and adults) have experienced consistent unresponsiveness from their caregivers and have consequently come to expect rejection or abandonment from their attachment figures (Hazan & Shaver, 1994). Subsequent forms of problem behaviour that develop (e.g., aggression) thus function as self-protective responses to minimise emotional contact in the parent-child relationship, which may later generalise to the peer context (Michiels et al., 2008). Therefore, aggression in the peer context (specifically with friends) occurs so that children may cope with this sense of insecurity and their expectations of rejection (i.e., protect their personal status) (Soenens, Vansteenkiste, Goossens, Duriez, & Niemiec, 2008).

Moretti et al. (2004) also suggest that adolescents classified as dismissing-avoidant (corresponding with the avoidant attachment style in children) are uninterested in forming attachment relationships with others, and feel confident in their own abilities to manage. Therefore, aggression in these individuals might not serve an interpersonal function (i.e., it is unrelated to needs for closeness or emotional bonds), but perhaps rather aids the person in achieving dominance and instrumental goals. In other words, as these individuals are not interested in establishing meaningful attachment bonds, their concern for the welfare or rights of others is diminished, enabling them to utilise aggression to satisfy their own needs (Moretti et al., 2004). These concerns with dominance and instrumental goals resemble those found in bullying, suggesting that from an attachment perspective, bullying may be the result of insecure avoidant attachment. In fact, some studies have found that perpetrators display higher levels of attachment avoidance compared to victims of bullying (e.g., Kõiv, 2012). Therefore, an attachment perspective dictates that aggression can be understood as (a) an attempt to engage others, (b) a reaction to perceived rejection, or (c) as an act to gain control or power. Possibly, the latter is implicated in bullying perpetration.

5.7 Measurement

5.7.1 Methods of assessment. The concept of attachment has caught the attention of researchers from different fields in psychology, resulting in independent investigations that reflect the research questions, goals, and measurement techniques of that field (Mattanah et al., 2011). Whereas one discipline (e.g., developmental psychology) would emphasise underlying patterns or themes in attachment behaviour that is not necessarily related to a particular attachment figure (i.e., attachment state of mind), another discipline (e.g., social psychology) focuses on assessing individual differences in attachment characteristics (e.g., differences in the degree to which individuals describe a relationship according to affective or cognitive aspects) (Mattanah et al., 2011). Therefore, the latter provides an indication of the overall quality of attachment security in a specific attachment relationship. Different researchers hold opposing views regarding how to approach the measurement of attachment (i.e., as categories or dimensions), as well as the specific tools needed for assessment (e.g., interviews versus self-reports).

5.7.1.1 Categories versus dimensions. A frequent topic of debate in literature on attachment is whether attachment should be conceptualised as a set of categories or as a continuum based on one or more dimensions (Borelli et al., 2010; Cowan & Cowan, 2007).

Initial work on attachment utilised a categorical or typological approach by coding and categorising infants (i.e., secure, avoidant, anxious/ambivalent, and disorganised) as well as adults (e.g., secure, preoccupied, and avoidant) into different attachment patterns or types (Ainsworth et al., 1978/2014; Bartholomew & Horowitz, 1991; Hazan & Shaver, 1994).

In contrast, several researchers have advocated that individual differences in attachment are a matter of degree rather than quality, thus promoting the use of a continuous-dimensional approach to study attachment. Although researchers agree that dimensions reflect important aspects of attachment relationships, there is no clear consensus regarding the nature or structure of these dimensions. Some of the suggested dimensions include proximity-seeking versus avoidant and angry/resistant strategies (Fraley & Spieker, 2003), as well as positive and negative models of self and others (Bartholomew & Horowitz, 1991). However, dimensions can be combined to produce attachment categories into which individuals can be classified (Fraley & Spieker, 2003). Researchers have preferred dimensional approaches to measurement due to their improved reliability, sensitivity, and decreased response bias (Shi, Wampler, & Wampler, 2013). Categorical and dimensional measures of attachments should be regarded as complementary, however, requiring more research in determining what aspect of attachment they measure, and under what circumstances each of these should be used.

5.7.1.2 *Observational methods, interviews, and self-reports.* Determining which is the most optimal technique for measuring attachment is another frequently disputed topic in literature (Borelli et al., 2010). As Bowlby placed much emphasis on attachment development during infancy and early childhood, most methods for assessing attachment naturally target these early years of life (Gullone & Robinson, 2005). The dominant approach for assessing attachment security during infancy and toddlerhood is observation, during which the dynamic processes occurring between children and their parents can be observed as in the Strange Situation (Ainsworth et al., 1978/2014). Such procedures primarily measure the behavioural component of attachment (i.e., proximity and support seeking), from which the affective/cognitive attachment component is inferred (Armsden & Greenberg, 1987). However, as children progress from infancy to adulthood, the set goal of the attachment system changes from maintaining proximity to assuring caregiver availability in later childhood and adolescence (Armsden & Greenberg, 1987; Benson et al., 2006). In essence, their attachment bonds are rather indicated in their cognitively based internal working models, reflecting the affective/cognitive dimensions of attachment (Armsden & Greenberg, 1987). For this reason, observational assessment methods have been replaced mostly by narrative

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

storytelling, projective assessments, the secure base script method, autobiographical interviews (e.g., the Adult Attachment Interview and Child Attachment Interview), and questionnaires (e.g., the IPPA) (Bosmans & Kerns, 2015; Kerns et al., 2011; McElhaney et al., 2009).

Although attachment in infancy, late adolescence, and adulthood has been studied extensively, less research has been conducted in middle childhood and preadolescence (Bosmans & Kerns, 2015). Therefore, no single dominant assessment technique exists for measuring attachment in these developmental periods. In fact, it has been argued that different measurement tools represent complementary approaches to assessing attachment (Borelli et al., 2016; Bosmans & Kerns, 2015). For example, it is believed generally that measurement techniques tap into internal working models that differ in their degree of automaticity (Gorrese & Ruggieri, 2012; McElhaney et al., 2009). For example, assessments based on narratives or interviews are believed to measure less conscious, more generalised representations of attachment (i.e., nonspecific internal working models reflecting generalised expectations from others). In other words, instead of measuring the current quality of an attachment relationship with a specific attachment figure, interview techniques rather assess one's general state of mind regarding attachment. In contrast, self-report questionnaires (e.g., the IPPA and IPPA-R for Children) tap into conscious internal working models related to a specific relationship (e.g., parent, peer, or romantic partner). The existence of internal working models at varying levels of consciousness (with earlier models being the most automatic) (Bowlby, 1973) has led to the proposal that a detailed depiction of one's attachment relations can be obtained only by using a large array of assessment methods (Gorrese & Ruggieri, 2012).

Each assessment approach presents with a number of strengths and limitations. For example, compared to projective, secure base script, and interview techniques, self-report measures require the least amount of time and costs with regard to their administration and coding (Borelli et al., 2016). Furthermore, these authors suggest that self-report measures may be superior to interviews in determining one's perceptions of attachment relationships.

In spite of these advantages, the use of self-reports as a means to assess attachment has also been criticised. These measures do not differentiate among the different attachment patterns identified by Ainsworth et al. (1978/2014), nor do they discriminate the different types of insecure attachment (Fouladi, Moller, & McCarthy, 2006). Yet again, many self-

report questionnaires (including the IPPA and IPPA-R for Children) were not designed to classify individuals into various attachment styles, but rather to provide a global indication of their attachment security (McElhaney et al., 2009). Additionally, doubt is expressed about whether people possess the necessary insight and honesty to evaluate attachment-related behaviours (Borelli et al., 2016). However, Crowell, Fraley, and Shaver (1999) state that even individuals who are unaware or defensive can still provide true descriptions. By making use of the principles of attachment theory, these authors gave the example that even though some adults may be reluctant to admit that they avoid close relationships, they might still describe themselves as independent and report no fears about abandonment—conscious beliefs that defensive individuals may hold about themselves. Therefore, many studies continue to utilise self-reports to study parent and peer attachment relations. A self-report commonly used is the IPPA, which is discussed in more detail in Section 5.7.2.

In summary, it has been suggested that when selecting an assessment technique, researchers should consider the relationship being studied (e.g., parent, peer, or romantic partner), the assumptions underlying the assessment technique (e.g., whether the construct of attachment is relationship-specific or a general characteristic of the child), as well as its conceptual connection with concepts related to attachment theory (Bosmans & Kerns, 2015; Gorrese & Ruggieri, 2012). In short, instead of questioning which method should be used predominantly to measure attachment, researchers should rather consider the component of the attachment construct being studied and select an assessment technique accordingly (Bosmans & Kerns, 2015).

5.7.2 Inventory of Parent and Peer Attachment (IPPA). Only a few psychometrically sound self-report measures exist that assess the affective/cognitive dimension of attachment, with the IPPA being the most widely used (Wilson & Wilkinson, 2012). Based on Bowlby's attachment theory, this inventory was designed to measure aspects of attachment (i.e., behavioural and affective/cognitive dimensions) in mid- to late adolescence and early adulthood. Armsden and Greenberg (1987) suggest the following:

We hypothesized that the internal working model of attachment figures may be tapped by assessing (1) the positive affective/cognitive experience of trust in the accessibility and responsiveness of attachment figures, and (2) the negative affective/cognitive experiences of anger and/or hopelessness resulting from unresponsive or inconsistently responsive attachment figures (p. 431).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Although the IPPA specifically measures one's internal working model of a particular attachment figure (M. Greenberg, personal communication, March 22, 2017), this model is complementary to and thus partly determines one's internal working model of self (Bowlby, 1973; Hazan & Shaver, 1994). In other words, if a child has a mental representation of his or her caregiver as responsive, the child will construct an internal working model of the self as valued and competent. Moreover, Armsden and Greenberg (1987) argue that specific internal working models of attachment can be probed by assessing three broad constructs, namely (1) trust (positive affective/cognitive dimension), which measures the degree of adolescents' trust that parents understand and respect their needs, (2) communication (behavioural dimension), which is concerned with adolescents' perception regarding the extent and quality of verbal communication in the attachment relationship, and (3) alienation (negative affective/cognitive dimension), which assesses adolescents' feelings of anger and isolation in the relationship with their parents. According to Mattanah et al. (2011), the Trust subscale assesses safe haven concerns, while the Communication subscale refers to secure-base behaviour. Whereas the Trust and Communication subscales are correlated positively, these subscales are related inversely with the Alienation subscale (Armsden & Greenberg, 1987). A score for each dimension, as well as a global attachment score, can be obtained, thereby reflecting the level of security experienced in an attachment relationship with a specific attachment figure (e.g., mother or father). Most studies tend to combine the subscales to provide a single score of attachment security (Mattanah et al., 2011); thus defining the quality of an adolescent's attachment to a parent as the "degree of trust and communication relative to alienation" (Armsden & Greenberg, 1987, p. 438). Therefore, the IPPA is neither categorical nor based on underlying dimensions of attachment. Instead, this measure reflects a continuous scale of security, yielding a score that corresponds with a single secure-insecure dimension (Armsden & Greenberg, 1987; Fouladi et al., 2006).

In a similar fashion, Gullone and Robinson (2005) developed the IPPA-R for Children to assess dimensions of attachment in 9- to 15-year-old children and adolescents. Although the IPPA and IPPA-R for Children assess the current quality of attachment relations with parents and peers, the presumed relative stability of internal working models from childhood to adolescence ensures that current attachment representations largely reflect those established earlier in life. Preadolescents and adolescents who are more secure are in a better position to attain age-appropriate social goals (i.e., gaining independence from parents by developing social relationships with peers and exploring a larger environment), while still keeping contact

with their parents through open communication (Armsden & Greenberg, 1987). In contrast, a lower score on attachment security is characterised by adolescent feelings of alienation, anger, and emotional detachment from their parents.

5.8 Chapter Summary

Attachment theory assumes that attachment behaviour on the part of a child aims to increase proximity with the primary caregiver, which in turn serves to protect the child from physical and psychological danger. This bond also allows the caregiver to function as a secure base (promoting child and adolescent environment exploration and individuation), as well as a safe haven, allowing the adolescent to return in times of distress. In essence, optimal child and adolescent development depends on the interplay between the attachment and exploratory systems, with adolescents becoming self-reliant and independent because of responsive attachment relationships. Parenting dimensions, especially parental acceptance, have been found to contribute significantly to the quality of the parent-child attachment relationship. However, the exact role and extent of influence of each parenting dimension during preadolescence is less clear, particularly with regard to parental control dimensions (i.e., the behavioural and psychological control dimensions). Parent-child interactions lead to the development of internal working models, which are representations of the self and others that guide individual behaviour and affect in various interpersonal interactions. However, uncertainty still exists regarding the stability of these working models, with some studies finding support for the prototype perspective, whereas others instead support the revisionist perspective.

As children approach adolescence, the function of the attachment system changes to provide the adolescent with “felt security” in ways that do not require the caregiver’s physical presence. Instead, as children begin to become more self-reliant, they gradually transfer attachment functions to peer relations. However, this transfer does not imply permanent cessation of parent-child attachment bonds, but rather a decrease in its importance and intensity. Despite this normative decline, parents continue to exert a significant influence in the lives of their adolescents. Other demographic variables that have been explored in literature on attachment—although to a much lesser extent—are gender and ethnicity. With regard to gender, it appears that most studies did not find any significant gender differences for security of attachment, nor did gender function as a moderating variable in relations between parent-child attachment and developmental outcomes. Although it appears that no

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

major cross-cultural differences exist for attachment security levels, more research is needed to determine whether ethnic variations as to how children communicate attachment needs exist, and the ways in which parents would satisfy these needs.

Security of attachment has been associated with a variety of positive developmental outcomes, whereas attachment insecurity is rather linked with maladaptive adjustment such as aggression and bullying. These associations are explained mainly by the concept of internal working models, stating that the expectations children develop in the parent-child attachment relationship will generalise to influence other, extra-familial interactions (e.g., peers). In turn, these expectations may influence a child's exploration behaviour and development of social skills, the processing of social information in peer interactions, and the ability to understand others' mental states and emotions. Consequently, several researchers started advocating that primary caregivers should be included in school efforts that combat bullying; with specific emphasis on improving the quality of parent-child attachment relationships among children and adolescents. Therefore, the current study will add to these efforts by investigating how attachment interacts with different parenting dimensions to give rise to preadolescent bullying perpetration and victimisation.

Much debate surrounds the assessment of attachment, with uncertainty ranging from the exact underlying construct that ought to be measured (i.e., patterns of attachment versus quality of a specific relationship), to whether attachment should be measured in terms of categories or dimensions, as well as which methodologies would measure attachment best (e.g., interviews versus self-reports). Although less attachment research has been conducted in middle childhood and preadolescence, self-reports such as the IPPA-R for Children prove valuable in assessing the degree of security of an individual's current attachment relationships.

Thus far, the current research has reviewed literature regarding bullying, perceived parenting dimensions, and parent-child attachment. The aim of this study was to determine how both perceived parenting dimensions and attachment contribute to preadolescent bullying perpetration and victimisation. The next chapter provides an overview of studies that have studied these variables simultaneously and attempted to provide explanatory models that would aid in understanding how parent-child relationship dynamics contribute to the phenomenon of bullying.

Chapter 6: Bullying, Perceived Parenting Dimensions, and Attachment

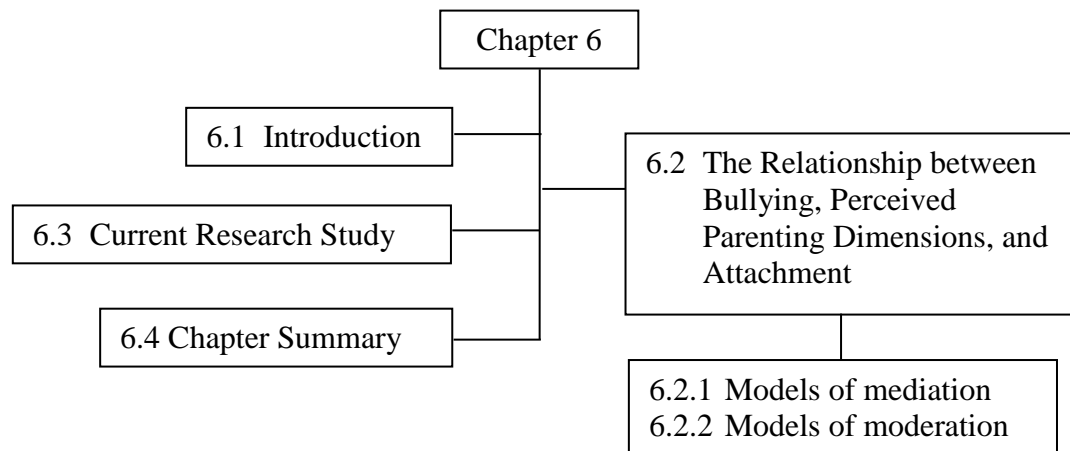


Figure 8. Outline of Chapter 6.

6.1 Introduction

In the preceding chapters, detailed discussions were provided regarding the constructs of bullying, perceived parenting dimensions, and attachment. Overviews of studies proving the direct effects of parenting dimensions and parent-child attachment on preadolescent developmental outcomes, including bullying, were also given. According to the DPM (the conceptual framework for this study), problem behaviour and psychopathology is the result of the interaction among multiple variables. Therefore, the current chapter reviews the findings of studies that have integrated the three constructs of bullying, perceived parenting dimensions, and attachment. More specifically, attention is given to models of mediation and moderation in an attempt to provide a more comprehensive account of the development of child and adolescent problem behaviour such as bullying. Figure 8 provides a visual depiction of the outline of the chapter.

6.2 The Relationship between Bullying, Perceived Parenting Dimensions, and Attachment

Although parenting dimensions and parent-child attachment have been identified consistently as risk factors of child and adolescent pathology, less is known regarding how these constructs interact to develop and maintain problem behaviour such as bullying (Breinholst, Esbjørn, & Reinholdt-Dunne, 2015; Gallarin & Alonso-Arbiol, 2012). Even though variables (in this case parenting and attachment) might be statistically related, it

remains important to investigate their separate contributions to child behaviour (Booth et al., 1994). Such information would provide empirically supported theoretical models, which in turn will inform prevention and treatment efforts (Breinholst et al., 2015). Some studies have begun to address this need by investigating parenting and attachment simultaneously and reveal how both these variables account for unique proportions of the variance in adolescent psychopathology, including bullying (e.g., Breinholst et al., 2015; Kokkinos, 2013; Muris, Meesters, & Van den Berg, 2003; Nunes et al., 2013). Such studies thereby established that adolescent problem behaviour is the result of numerous independent risk factors.

However, these relatively simple models may not fully explain multifaceted phenomena such as bullying perpetration and victimisation. Instead, such behaviour may require models that are more complex and would demonstrate possible interactions between parenting and attachment. As discussed in Chapter 2, the mediation and moderation models can be used to explain developmental phenomena. Whereas mediators are used to understand the processes by which two factors are related better, moderators determine if two variables are associated in the same way across various conditions or groups (MacKinnon, 2011). In some cases, the same construct can function as a mediator, moderator, or both, thereby allowing researchers to test competing theories about developmental pathways and reach a conclusion on which theoretical model best explains the relationship observed among constructs (Rose, Holmbeck, Coakley, & Franks, 2004). Whether a variable functions as a mediator or moderator would depend on the research question. From the discussion to follow, it will become clear that attachment is such a variable, acting as a mediator under certain circumstances, but as a moderator in others. As studies that investigate the relations between perceived parenting dimensions and attachment relative to bullying are scarce, the remainder of this chapter mostly refers to studies that have been conducted and reported in literature on childhood and adolescent developmental outcomes and general aggression.

6.2.1 Models of mediation. Mostly, researchers have explained associations between parent-child interactions and child behaviour in terms of social learning theory principles (i.e., parents serve as models for child behaviour) (Michiels et al., 2008). However, researchers are beginning to adopt alternative perspectives regarding the role of parenting in developing and maintaining child problem behaviour. One perspective involves considering the construct of attachment as an explanation for how parenting behaviour influences child and adolescent developmental outcomes (i.e., attachment as a mediator). A mediator is the mechanism through which one variable influences another variable (MacKinnon, 2011; Rose et al., 2004).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Therefore, besides a direct behavioural link between parenting and child behaviour, an indirect link or mediational model that includes the construct of attachment is also plausible (Michiels et al., 2008). According to a mediational model, the relationship between a parenting dimension (predictor variable) and adolescent developmental outcome (criterion variable) is explained partially or fully by the quality of the parent-child attachment resulting from that specific parenting dimension. Attachment is a relevant mediator to the extent that a certain parenting dimension increases attachment insecurity, which subsequently results in pathological behaviour (Kobak, Cassidy, Lyons-Ruth, & Ziv, 2006).

Although it is often assumed that attachment would likely function as a mediator between parenting and adolescent behaviour, only a few studies indeed investigated such an assumption empirically. For example, researchers found that attachment mediated the links between several parenting dimensions and anxiety symptoms (Breinholst et al., 2015), externalising problems (Bosmans et al., 2006; Roskam, Meunier, & Stievenart, 2011), peer attachment and self-esteem (Cai et al., 2013; Doyle & Markiewicz, 2005), as well as depressive and conduct disorder symptoms (Scott et al., 2013) in samples of children and adolescents. Essentially, attachment may serve as the process through which parenting behaviour improves or hinders preadolescent adjustment (Cai et al., 2013).

Literature on general aggression indicates that attachment has also been found to function as a mediator. For example, Gallarin and Alonso-Arbiol (2012) found that attachment fully mediated the association between perceived parenting dimensions (i.e., acceptance and coercion) and aggression in older adolescents. Such findings suggest that even though parental socialisation practices lose their importance with age and do not predict adolescent aggression directly, they can still affect adolescents' perceptions regarding the security of their attachments with their parents. In turn, insecure representations of attachment would affect adolescents' levels of aggressiveness, highlighting how despite adolescent individuation, the parent-child bond continues to be important.

As the association between parenting and traditional bullying (and to a lesser extent cyberbullying) has been well established in the literature, a natural extension would be to investigate the processes underlying this relationship. Although researchers investigated factors such as adolescent self-control (Li et al., 2015), depressive symptoms (Papadaki & Giovazolias, 2015), and empathy (Fousiani et al., 2016) as possible mechanisms explaining the relations between various parenting dimensions and bullying, no studies to date

(according to a search conducted on EBSCOhost on 15 January 2017) examined whether the construct of attachment could serve as a mediator in these associations. Accordingly, the current research study set out to determine whether attachment serves as the underlying mechanism that would explain the relations between perceived parenting dimensions (i.e., acceptance, firm control, and psychological control) and different forms of bullying perpetration and victimisation (i.e., physical, verbal, social-relational, and in cyberspace). Figure 9 presents the model of mediation for bullying perpetration and victimisation that is investigated in the current research study.

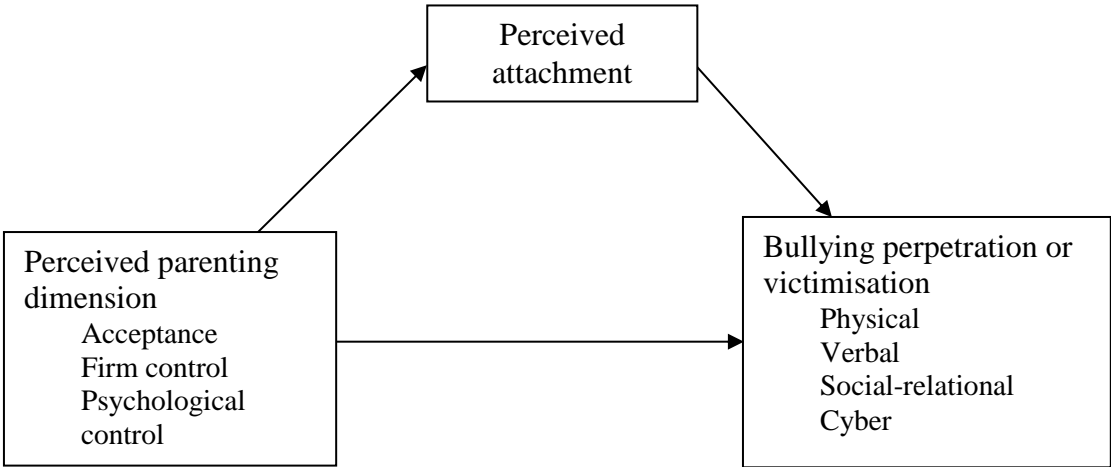


Figure 9. Model of mediation among perceived parenting dimensions, attachment, and bullying perpetration or victimisation.

Investigating models of mediation is important for research and treatment purposes: With regard to research, these models allow researchers to examine how variables from different theoretical backgrounds interact to affect the outcome variable, thereby broadening the predictive power for bullying (Roskam et al., 2011). In terms of treatment, mediation models would allow for a shift from traditional parenting programmes that mainly focus on parent child-rearing behaviour towards interventions that also include work on the parent-child attachment bond.

6.2.2 Models of moderation. Alternatively, it might be more accurate to interpret the associations between parenting dimensions, attachment, and problem behaviour in terms of moderation instead of mediation. In other words, one could investigate whether the effect of parenting becomes more or less robust in the presence of attachment. Moderation models state

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

that parenting dimensions not only result in, but also interact with preadolescents' perceptions of parent attachment. In turn, these interactions lead to the onset and maintenance of problem behaviour. Thus, the effect of parenting behaviour on child adjustment would vary depending on the quality of the parent-child attachment relationship: Whereas insecure attachment may exacerbate the effect of negative or inappropriate parenting behaviour on developmental outcomes, secure attachment could make the child more resilient to the effects of such parenting.

Cyr et al. (2014) conducted a longitudinal study that demonstrated that attachment security (as measured during infancy) moderated the relationship between maternal criticism and subsequent child aggression. More specifically, exposure to maternal criticism in preschool predicted Grade 1 child aggression only when children experienced insecure attachment relationships with their mothers. Together with the findings that maternal criticism and attachment security did not correlate (i.e., secure and insecure children did not experience different levels of criticism), it suggests that attachment may influence child behaviour by providing the context in which other risk factors function. In other words, the quality of attachment may influence how children perceive and interpret their parents' behaviour, in which securely attached children are affected less by negative parenting behaviour due to a stronger emotional foundation.

Similarly, a longitudinal study conducted by Murray, Dwyer, Rubin, Knighton-Wisor, and Booth-LaForce (2014) assessed whether relationship quality with one parent (e.g., the mother) in Grade 8 moderated the association between the other parent's (e.g., the father's) use of psychological control in Grade 8 and adolescent aggression in Grade 9. Findings revealed that psychological control (from either the mother or father) was associated with aggression when adolescents experienced a poor quality relationship with the other parent. Furthermore, among adolescent males who reported high-quality relationships with their fathers, maternal use of psychological control was related to lower rates of aggression. Therefore, these results suggest that attachment may serve as both a risk and protective factor: When one parent utilises psychological control, the risk for adolescent aggression is enhanced by the poor-quality relationship that the adolescent shares with the other parent. In contrast, a high-quality relationship with one parent may buffer the effect of another parent's use of psychological control on adolescent aggression. Thus, parent-child attachment may significantly influence the extent to which parenting dimensions are able to shape child and adolescent aggressive behaviour (Murray et al., 2014).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Studies such as those cited above suggest that the associations between parenting, attachment, and adolescent behaviour would be incomplete by only examining one variable in isolation (i.e., either parenting behaviour or the parent-child attachment relationship). In other words, to comprehend the role of parents in the development of child problem behaviour fully, parenting dimensions as well as the attachment relationship need to be investigated.

In the literature on bullying, factors that have been identified as potential moderators in the parenting-bullying relationship include participant age, gender, culture, parenting styles and practices, and coping strategies (Baldry & Farrington, 2005; Boel-Studt & Renner, 2013; Lereya et al., 2013; Low & Espelage, 2013; Papadaki & Giovazolias, 2015). As with mediational studies, however, an EBSCOhost search on 15 January 2017 revealed that no studies thus far have examined whether parent-child attachment could function as a moderator in the relation between perceived parenting dimensions and bullying. Figure 10 illustrates the model of moderation for bullying perpetration and victimisation that was investigated in the current research study.

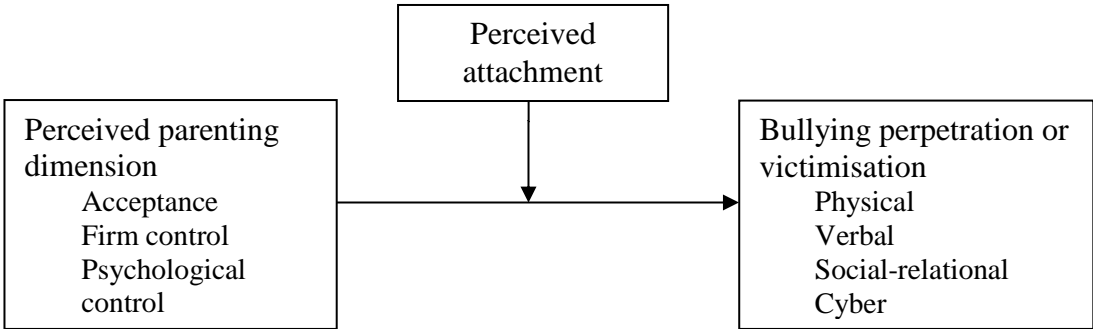


Figure 10. Model of moderation among perceived parenting dimensions, attachment, and bullying perpetration or victimisation.

6.3 Current Research Study

From the discussions in this chapter, it is clear that uncertainty still exists regarding how the constructs of parenting dimensions and attachment interact to give rise to preadolescents' problem behaviour, specifically bullying. In addition to the individual contributions of these variables (which have been well documented), studies have only begun to examine the relative contributions of parenting and attachment to adolescent adjustment when studied in conjunction. Furthermore, whereas some researchers regard attachment to be a mediator of

parenting, others claim that it can be conceptualised better as a moderating variable. Hence, the current research study set out to clarify the role of attachment, relative to that of parenting dimensions, in the development of preadolescent bullying perpetration and victimisation. Stated another way, this study aimed to determine how best to conceptualise the role of attachment in the relationship between parenting and bullying, as a mediator, moderator, both, or neither.

The research study made use of self-reports to measure a preadolescent's perception of current parenting dimensions and attachment. However, the mediation and moderation models suggested in the current study assume parenting dimensions to be pre-existing constructs: Whereas mediation models generally assume a developmental progression from dimensions of parenting to attachment and finally bullying (i.e., parenting is conceptualised as existing before, thus giving rise to current parent-child attachment), models of moderation are focused on how attachment moderates existing relationships between parenting dimensions and bullying. Although participants report their perceptions of current parenting behaviour, the fact that some dimensions remain consistent over time (Booth et al., 1994) implies that preadolescents' perceptions reflect (to some extent) both current and past parent behaviour. Likewise, participants report the quality of their attachment relationship with their primary caregiver. According to Bowlby (1973), internal working models of attachment become increasingly resistant to change, suggesting that a preadolescent's perception of current attachment quality largely reflects that which has been established earlier in life.

6.4 Chapter Summary

Research conducted within a developmental psychopathology framework underscores a shift from simple causal models to more complex models examining how constructs interrelate to give rise to child and adolescent developmental outcomes. Therefore, models of mediation and moderation may provide a deeper understanding regarding the relationship between two variables, by respectively providing information on the processes that may explain the relationship, as well as the conditions under which the two constructs will be related. As bullying perpetration and victimisation may result in detrimental developmental consequences, including the development of clinical disorders, it is imperative that more information is gathered on *who* will most likely engage in bullying perpetration or victimisation (moderation) and *why* (mediation). By testing both mediation and moderation models, it can be shown statistically which model best explains associations among multiple

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

variables. Therefore, the current research study examined whether and how perceived parenting dimensions and attachment can be combined to account for preadolescent bullying perpetration and victimisation. For example, a certain parenting dimension could influence how preadolescents perceive the quality of the parent-child attachment relationship, which in turn affects their participation in bullying (i.e., attachment is a mediator). However, it is also possible that the deleterious effects of low perceived parental acceptance or high levels of firm or psychological control on preadolescent adjustment may be evident only in the context of low parent-child attachment. That is, attachment may buffer problematic parenting behaviour. In this case, attachment would serve as a moderator variable.

The next chapter outlines the objectives of the current research study, followed by a discussion on the methods used to sample participants, the measures used to collect data, and a description of the statistical procedures utilised for data analysis.

Chapter 7: Methodology

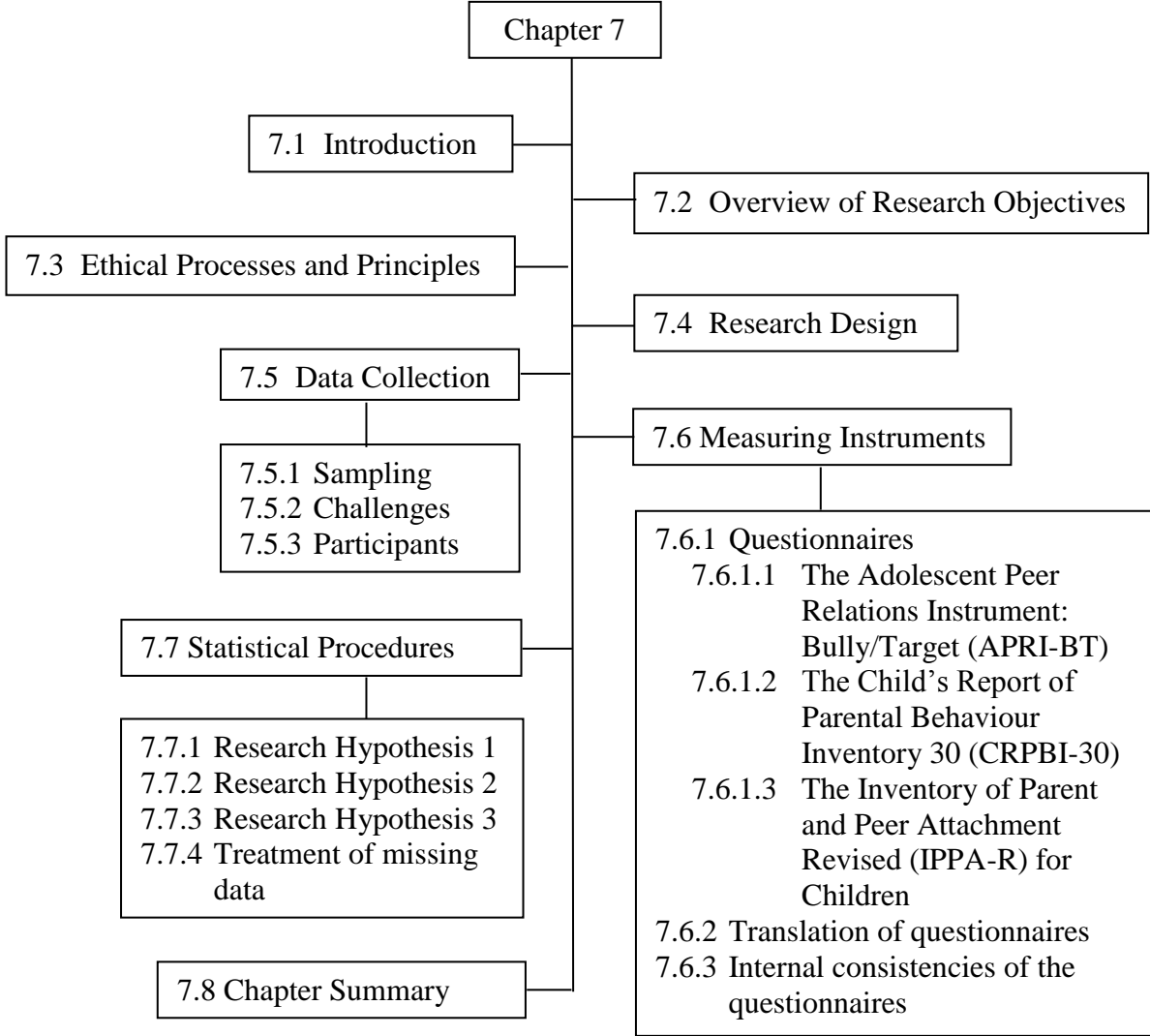


Figure 11. Outline of Chapter 7.

7.1 Introduction

This chapter begins with an overview of the research hypotheses, followed by discussions on the ethical processes and principles as well as the design of the current research study. Next, attention is given to the process of data collection, including the sampling of the participating schools, the challenges encountered during the collection of data, and a description of the research participants. This is followed by discussions on the measuring instruments utilised in this study, the translation process that was followed, and the internal consistencies that were calculated for each measuring instrument. The chapter

concludes with a description of each of the statistical procedures utilised for the respective research hypotheses. Figure 11 provides a visual summary of the chapter outline.

7.2 Overview of Research Objectives

The first objective of this study was to determine whether significant relationships exist between various perceived parenting dimensions and different forms of bullying perpetration and victimisation (physical, verbal, social-relational, and in cyberspace) among preadolescents. In other words, the study set out to examine whether perceived parenting dimensions could account for a significant percentage of the variance in each of the different forms of bullying perpetration and victimisation. Should such relationships exist, the second objective aimed to determine whether parent-child attachment mediated or moderated these correlations between perceived parenting dimensions and bullying. To determine whether the second objective should be conducted on the entire group or for separate gender and ethnic groups, the potential effect of gender and ethnicity on the relationships between perceived parenting dimensions and bullying perpetration and victimisation was investigated prior to testing the potential intervening effect of parent-child attachment on these relationships. Finally, the third objective of the study was to investigate whether there were any significant differences in the means of bullying perpetration and victimisation between the different gender and ethnic groups.

7.3 Ethical Processes and Principles

To ensure that the current research study would be conducted ethically, ethical clearance was firstly obtained from the Research Ethics Committee of the Faculty of Humanities at the University of the Free State (Ethical clearance number: UFS-HUM-2014-48). Further permission was obtained from the Free State Department of Basic Education, as primary school learners were the intended participants.

Professional bodies such as the American Psychological Association (APA, 2010) and the Health Professions Council of South Africa (HPCSA, 2008) have highlighted several general ethical principles that pertain to all aspects of psychologists' work, including research. These include the principles of best interest (beneficence and non-maleficence), respect (autonomy and confidentiality), justice, fidelity, and integrity. Especially in the case of children—defined as a vulnerable group (HPCSA, 2008)—these ethical principles need to be upheld at all times to ensure that the research is conducted ethically. The choice of conducting

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

research in this vulnerable group is justified by the fact that the study intended to investigate bullying in a developmental period in which bullying is a highly prevalent phenomenon. Even though these principles are discussed separately, they are not mutually exclusive (Gelling, 1999). As will be demonstrated, the same example can be an illustration of two or more ethical principles.

The principle of best interest includes beneficence and non-maleficence, which are defined respectively as promoting the well-being of the research participants and ensuring that no harm comes to them by participating in the study (Allan, 2015; APA, 2010; HPCSA, 2008). With regard to beneficence, the researcher ensured that the potential for participant and societal benefit outweighed the costs involved (Gelling, 1999). For example, the participants were allowed to withdraw from the process without any punishment as soon as they appeared uncomfortable in answering the items. Additionally, the researcher provided participants with the opportunity to write down their names and contact details on the last page of the questionnaires in a case where they required assistance with any bullying problems. In this way, the study would benefit participants by identifying those who struggle with bullying and providing them with the necessary assistance by referring them to the social worker responsible for that particular school. This study also benefited the participating schools, as feedback was given to the principals regarding the outcomes of the study, and learners were provided with an anti-bullying presentation (at no additional cost).

For non-maleficence, the type of harm that was expected from this study was that of temporary participant discomfort, which was expected to occur possibly during and after completing the study (Gelling, 1999). As the participants needed to complete several measures, it was expected that they might experience fatigue, restlessness, tense muscles, headaches, or require the bathroom during the study. Therefore, the participants were allowed a short interval. Any participant queries or complaints were referred to and addressed by the primary researcher or supervisor. Participants were also instructed to concentrate only on their own work, to minimise any anxiety, embarrassment, or other negative consequences resulting from knowing their peers' responses on any of the measure items. Thus, any discomfort experienced during the research process was expected to be relieved once the participants had finished completing the questionnaires. Any distress experienced after completion of the study was most likely already existing (e.g., participants feeling distressed due to existing victimisation), instead of specifically emerging because of the study itself. Still, this was addressed by granting participants the opportunity to write down their names so that the social

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

worker appointed for that specific school could provide them with assistance. No monetary incentive was provided to those participating in the study. In this way, the researcher did not abuse the power she had over the research participants by exploiting the adverse socioeconomic status of some participants to encourage them to take part in the research (HPCSA, 2008). None of the parties involved had to incur any expenses because of the research, as the researcher ensured that all parent consent forms, learner assent forms, and questionnaires were photocopied prior to conducting the study. Similarly, data collection took place at the schools during school hours, with the dates and times planned long in advance to ensure that the study did not interfere with the learners' academic programme. Data collection took place during the second and third school terms, and thus did not disturb the learners' final exams (which take place during the fourth term).

The principle of respect includes two elements, namely that of autonomy and confidentiality (HPCSA, 2008). Respect for autonomy entails respecting participants' right to make informed decisions regarding participation in the research (Gelling, 1999). All parties involved in the research, including the school principals, parents, and learners, were given forms of informed consent (or assent in the case of the learners), which provided them with all the necessary information about the nature of the research (see Appendices A, B, and C). Information on the type of questionnaires included in the research, as well as what would happen if learners provided their names on the questionnaires for assistance, was also included in these documents. These forms were available in English and Afrikaans and at an acceptable level of literacy for each party (i.e., principal, parent, and preadolescent). Learners who did not return signed parent consent forms were not allowed to participate in the study. Even in cases where written parental consent was provided, learners who did not sign the assent form were allowed to refuse participation. Although the APRI-BT was used—in which neither a definition of bullying nor the words “bully” and “victim” appeared anywhere in the measure—participants were still informed that the study was related to bullying. In this way, learners were fully informed regarding the purpose of the research.

The researcher also respected participants' right to confidentiality. If participants are not assured of confidentiality, they might be reluctant to provide all the required information, rendering the results invalid (Gelling, 1999). For example, the school principals were assured that the name of their school would not be made public. All parties were assured that the questionnaires would be completed anonymously. Only in the case where learners wrote down their names and contact details for assistance with bullying problems, were these names

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

provided to the social worker assigned to that particular school. No other information (including the participant's responses or scores on the questionnaires) was provided. Participants were informed especially of the fact that their responses (particularly on the parenting and attachment questionnaires) would not be revealed to their primary caregivers (unless they disclosed information that was life-threatening in nature). Additionally, participant confidentiality was also protected by referring the learners to the social worker responsible for a particular school, instead of disclosing their names to the class teacher or school principal. To ensure further that the information obtained from the study would remain confidential, all research documents, including the informed consent and assent forms, as well as participant questionnaires, were stored in a secure location to which only the primary researcher has access.

The principle of justice compels researchers to select and treat all participants fairly, ensuring that no unfair discrimination would occur at any stage during the research process (Allan, 2015; HPCSA, 2008). In the current study, the researcher provided all Grade 5 and 6 learners with the opportunity to participate in the research, although only the results of certain learners (i.e., those who satisfied the inclusion criteria) were utilised for the study. Data collection took place at the respective schools during school hours; ensuring that all learners had an equal chance of participating in the study without incurring additional expenses (e.g., money spent on extra petrol to drive a learner to the research study).

In accordance with the principle of fidelity, the researcher established a trusting relationship with the people (i.e., principals and learners) with whom she worked by providing them with honest information regarding the nature and consequences of the study (Gelling, 1999). Similarly, the researcher adhered to the principle of integrity by ensuring that the research was of sufficiently high quality (APA, 2010). As already discussed, the researcher ensured that appropriate measures were taken to ensure that no harm came to the participants. No deception was involved, in that the aims of the research were indicated clearly so that all parties were fully informed on what the study intended to achieve. Furthermore, the researcher kept her promise to the school principals by providing them with feedback regarding the outcomes of this study, and the learners with an anti-bullying presentation. Additionally, the research assistants received training to enhance the quality of the data-collection process. The researcher did not have any prior relationships with, or obligations towards any of the schools involved in the study; thus, there were no instances in

which the researcher experienced any conflict of interest between the research and other school obligations (Allan, 2015).

7.4 Research Design

The current study can be characterised as quantitative, nonexperimental type of research. Research Hypotheses 1 and 2 made use of a correlational research design, as these hypotheses respectively involved correlation and regression analyses (Field, 2013). A criterion group research design was used for Research Hypothesis 3 (comparing group means).

7.5 Data Collection

7.5.1 Sampling. To establish external validity, a list of all the Free State primary schools was obtained from the Department of Education (Free State Department of Education, 2017). Accordingly, there are 765 primary schools in the Free State Province. Only public and independent mixed-gender schools, of which the majority of Grade 5 and 6 learners satisfied the demographic requirements (i.e., white learners with a home language of Afrikaans and/or black learners with a home language of Southern Sotho), were selected. After these inclusion criteria had been implemented, 480 primary schools remained. Subsequently, 24 primary schools (constituting 5% of the total number of schools) across diverse socioeconomic status were drawn to obtain a multiethnic sample of preadolescents. The researcher contacted each school personally to provide the principal of the school with the objectives of the research and to obtain permission to conduct the research at that particular school. After the school principal had provided consent (see Appendix A), schools distributed parental consent documents (see Appendix B). Inclusion criteria included boys and girls, preadolescents who were 10–12 years old in Grades 5 and 6, learners who were educated in English or Afrikaans, white learners with a home language of Afrikaans, black learners with a home language of Southern Sotho, as well as daytime learners and those who lived in the hostel. Exclusion criteria included all learners who were younger than 10 years, or older than 12 years on the day of testing, as well as learners whose home language was not Afrikaans or Southern Sotho. Only learners who (a) fulfilled these criteria, (b) had returned signed parental consent forms to participate in the study, and (c) were available on the day of data collection participated in the study. Learners were informed of the objectives of the study on the days of data collection,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

and written informed assent (see Appendix C) was obtained from each learner prior to their participation in the study (principle of autonomy).

All participants were guaranteed anonymity, but they were given the option of writing down their names and contact numbers in cases where they felt they required assistance with any bullying problems (principle of best interest). In such a case, subsequently, the names of all participants were given to the social worker designated for that particular school for follow-up assessment and possible intervention. Furthermore, learners were informed that the study was being conducted for degree purposes and that the findings could be published. To collect the data, several research assistants (postgraduate students) accompanied the primary researcher. These assistants were provided with information and training on how to collect the study data and adhere to the ethical principle of integrity. Data were gathered during the second and third school terms (May – September 2015) in the learners' classrooms or assembly hall with the researcher or assistant reading each measure item aloud to enhance learner comprehension (principles of best interest and justice). Each session of data collection took between 60 and 90 minutes to complete.

7.5.2 Challenges. Several challenges were encountered during the process of data collection. Firstly, it was found that upon arrival, some schools and/or learners had not distributed and/or returned the parental consent forms in time; consequently, the date of data collection had to be rescheduled. Additionally, disruptions were experienced in some classes, such as announcements from the school intercom system, teachers, and/or learners, as well as outside noise as the other grades changed between their classrooms. During such an incident, the researcher or assistants would stop their reading and continue only after the cessation of that particular disruption. After such a disruption, the researcher and research assistants ensured that the learners remained calm and focused by repeating an instruction, question, or item.

7.5.3 Participants. A total number of 4812 Grade 5 and 6 learners were approached in the twenty-four schools. Data were collected from all Grade 5 and 6 learners in the selected schools due to the multiethnic class composition and difficulties in isolating the learners who satisfied the inclusion criteria from the remainder of the class. Furthermore, all learners were initially included in data collection to adhere to the ethical principle of justice in treating all research participants fairly (Allan, 2015). However, after the exclusion criteria (as discussed in paragraph 7.5.1) had been implemented and all measures in which learners provided more

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

than one answer to a test item had been excluded, the final sample used for the current study comprised 1078 participants, representing 22.4% of the original group of 4812 learners. According to the Department of Education, 103 673 Grade 5 and 6 learners were enrolled in independent and public schools in the Free State in 2015 (Free State Department of Education, 2015). Neuman (1994) suggests that for large populations over 100 000, a 1% sampling ratio is required (i.e., roughly 1036 participants). In this case, the sample comprised 1078 participants, which is a satisfactory sample size.

An analysis of the sample in terms of age, gender, grade, and ethnicity broken down per school can be found in Appendix D. In general, there were more girls (59.1%) compared to boys (40.9%). Additionally, there were more white Afrikaans-speaking participants (56.9%) than black Southern Sotho-speaking participants (43.1%). This distribution of the sample in terms of gender and ethnicity is outlined in Table 5.

In the girls subsample, 363 learners were white with a home language of Afrikaans (57%), whereas 274 learners were black with a home language of Southern Sotho (43%). With regard to the boys subsample, there were 250 white learners with a home language of Afrikaans (56.7%) and 191 black learners with a home language of Southern Sotho (43.3%). Thus in both genders, the number of white Afrikaans-speaking participants outnumbered the black Southern Sotho-speaking learners. Furthermore, 499 participants (46.29%) wrote down their names requesting assistance with bullying problems.

Table 5

Frequency Distribution according to Gender and Ethnicity

Biographical variable	N	%
Gender:		
Girls	637	59.1
Boys	441	40.9
Ethnicity:		
Black Southern Sotho participants	465	43.1
White Afrikaans participants	613	56.9

7.6 Measuring Instruments

Participants were required to complete a biographical questionnaire (see Appendix E) relating to their grade, age, gender, racial group, and home language. In addition, they completed three questionnaires, including measures of bullying perpetration and victimisation (APRI-BT), perceived parenting dimensions (CRPBI-30), and perceived quality of attachment to their parents (IPPA-R for Children). Copies of these questionnaires are included in Appendices E, F, and G. Each measure is discussed in more detail in the next section.

7.6.1 Questionnaires

7.6.1.1 The Adolescent Peer Relations Instrument: Bully/Target (APRI-BT). The APRI-BT (Parada, 2000) is a 36-item self-report instrument designed to measure three types of bullying perpetration and victimisation (physical, verbal, and social-relational) in school grades 7–11. In this study, the original APRI-BT was extended to include an additional eight items on each scale (obtained from the author of the questionnaire) that assess cyberbullying and victimisation (see Appendix F for the measure). All items are measured on a 6-point Likert-type scale, with response options ranging from *never* (1) to *every day* (6). The measure is scored by summing the items for each subscale (physical, verbal, social-relational, and cyber), or by adding all the items to obtain total scale scores for bullying perpetration and victimisation respectively. Because one of the purposes of this study was to investigate how perceived parenting dimensions related to specific types of bullying, only the subscales were used. There are no cut-off scores for this measure; thus, higher scores represent more frequent involvement in bullying either as a perpetrator or as a target (i.e., the dimensional approach—Section 3.8.1.2).

Several studies report good Cronbach alpha coefficients ranging from 0.82 – 0.93 for the subscales (physical, verbal, and social-relational), and from 0.93 – 0.95 for the Bullying perpetration and Bullying victimisation scales (Griezel et al., 2012; Marsh et al., 2011). Acceptable internal consistency reliabilities for all three bullying perpetration and victimisation subscales have also been found with primary school-aged children in Grades 5 and 6, with alpha coefficients ranging from 0.81–0.90 (Finger et al., 2008). The latter study provides evidence that the APRI-BT can be used with primary school learners, like the current study that also made use of Grade 5 and 6 learners. Construct validity for the scales

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

(perpetrator and target) and for each of the subscales (physical, verbal, and social-relational) have been reported (Marsh et al., 2011).

With permission from the author (R. Parada, personal communication, October 14, 2013), certain words in the measure were modified to accommodate learners in the South African context better. For example, the term *student(s)* has been changed to *learner(s)*. In addition, the time frame being assessed was changed from the past year to the past school term, with the frequency indicator of *sometimes* rephrased as *once or twice this term*. Although no definition of bullying was provided to the participants beforehand (i.e., behaviour-based approach—Section 3.8.1.1), learners were instructed to include only aggressive events perceived as intentional, to reflect the traditional definition of bullying better.

7.6.1.2 The Child's Report of Parental Behaviour Inventory 30 (CRPBI-30). The CRPBI-30 (Schaefer, 1965b; Schludermann & Schludermann, 1970, 1988) is a 30-item inventory that is used to measure perceptions of three parenting behaviours, each associated with one of the core dimensions of parenting: Parental support (Acceptance versus Rejection scale), behavioural control (Firm Control versus Lax Control scale), and psychological control (Psychological Autonomy versus Psychological Control scale). Thus, this measure adheres to a bipolar, dimensional approach for measuring parenting (Section 4.3.1.1). The CRPBI-30 is a shortened version of the original CRPBI, and includes two sets of thirty items about mothers and fathers. In this study however, the participants were asked to respond to only one set of gender-neutral items for the parent with whom the participant spent the most time (i.e., primary caregiver). Owing to the diverse range of family compositions found in South Africa, the term *parent* was changed to *caregiver*.

The Acceptance versus Rejection scale measures the degree to which a parent is perceived to be accepting, supporting, and affectionate towards a child. Higher scores on the Acceptance scale reflect parenting that is more supportive and accepting. The Firm Control scale includes items that assess direct parental attempts to guide and monitor their child's behaviour, as well as a strict enforcement of rules. Higher scores within this scale reflect more perceived parental firm control and the parent as having several strict rules. The Psychological Control scale contains items measuring indirect parental controlling behaviour that interferes with a child's ability to develop as an individual apart from the parent. The higher the score on the Psychological Control scale, the greater the degree to which the

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

caregiver is perceived to use anxiety, guilt, withdrawal of love, and expression of disappointment as disciplinary methods. Each scale contains ten items measured on a 3-point Likert-type scale; with participants indicating whether their caregiver's behaviour is *a lot like* (3), *somewhat like* (2) or *not like* (1) the behaviour described by the item. A maximum score of 30 can be obtained for each scale by summing the scores of the Acceptance and Psychological Control scales. The total score for the Firm Control scale can be obtained by adding the scores of some items to the scores of the items that have been scored reversely.

Although the development of the CRPBI-30 has not been presented in a peer-reviewed publication, previous studies have demonstrated acceptable scale internal consistencies, with Cronbach alpha coefficients ranging from 0.63 to 0.93 (O'Donnell et al., 2010; Polfuss & Frenn, 2012; Reitman & Asseff, 2010). The internal consistencies falling in the lower range were found mostly for the Firm Control scale. Concurrent and convergent validity for this measure has also been established (Locke & Prinz, 2002; Schludermann & Schludermann, 1988). Therefore, the psychometric properties of this measure appear satisfactory, and it has been characterised as a "well-established" measure (Alderfer et al., 2008). This measure can be found in Appendix G.

7.6.1.3 The Inventory of Parent and Peer Attachment Revised (IPPA-R) for Children. The IPPA-R for Children (Gullone & Robinson, 2005) assesses preadolescents' and adolescents' (ages 9–15) perceptions of the quality of their current attachment relationships to their parents and friends (see Appendix H). The age range of this measure was deemed appropriate for the age range of the preadolescents in this study (i.e., 10–12 years). It is a revised version of the original IPPA (Armsden & Greenberg, 1987), which was developed initially to measure the quality of attachment in late adolescents.

The IPPA-R for Children includes a Parent Attachment scale, comprised of three subscales (Trust, Communication, and Alienation) aimed at measuring the three aspects of attachment during preadolescence and adolescence (i.e., the degree of mutual trust, the quality of communication, and the extent of alienation). The Trust subscale measures the extent to which a preadolescent perceives the attachment figure as available and sensitive to his or her needs, as well as the degree of mutual understanding and respect in the parent-child attachment relationship. The Communication subscale assesses the degree of open, verbal communication between the preadolescent and the attachment figure, whereas the Alienation subscale measures feelings of anger and interpersonal alienation. In this study, the total score

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

for the Parent Attachment scale was used, as Armsden and Greenberg (1987) originally defined quality of attachment as the degree of trust and communication in relation to alienation. Furthermore, Mattanah et al. (2011) found support for the practice of using a single score for global attachment security by demonstrating how the attachment subscales did not moderate the relation between parental attachment and adjustment outcomes. This would possibly suggest that representations of parental attachment are unidimensional in nature, corresponding with a single secure-insecure dimension (Chapter 5, Section 5.7.2). Participants were required to rate how often each item was true for them on a 3-point Likert-type scale ranging as *always true* (3), *sometimes true* (2), and *never true* (1). There are twenty-eight items measuring attachment to parents, and twenty-five items measuring attachment to peers. For the purposes of the current study, only the Parent Attachment scale was used.

The total score for the Parent Attachment scale was obtained by summing the scores of the Trust and Communication subscales, and then subtracting the Alienation subscale score. Higher scores indicate higher quality (or more secure) parent-child attachment (i.e., higher trust, better communication, and lower feelings of alienation). The three subscales (Trust, Communication, and Alienation) of the Parent Attachment scale have demonstrated good reliability, with Cronbach alpha coefficients ranging from 0.78–0.82 for a sample children and adolescents (Gullone & Robinson, 2005). The findings from the study conducted by Gullone and Robinson (2005) also provide strong support for the convergent validity of the IPPA-R for Children.

7.6.2 Translation of questionnaires. The sample for this study consisted of white learners with a home language of Afrikaans and black learners with a home language of Southern Sotho. However, participants were required to complete the questionnaires in their language of education. That is, Afrikaans-speaking participants completed the questionnaires in Afrikaans, whereas Southern Sotho-speaking participants completed the questionnaires in English (seeing that none of the selected schools provided Grade 5 and 6 Southern Sotho-speaking learners with education in their home language). However, research assistants fluent in Southern Sotho were available in cases where learners required assistance with comprehension of items. For the white Afrikaans-speaking learners, all parent consent forms, learner assent forms, and study measures had to be translated into Afrikaans. Therefore, the process of back translation was applied (Maneesriwongul & Dixon, 2004). A registered, trained bilingual (English/Afrikaans) translator translated these questionnaires from English into Afrikaans. The Afrikaans translations were then translated back into English by another

registered bilingual translator. The wording of this translation was then compared to the original English version. Any discrepancies between the translations were resolved through discussions with the original translator, and the relevant Afrikaans items were reformulated accordingly. This thorough process of translation again demonstrates adherence to the ethical principle of integrity. As the language of education for the black Southern Sotho-speaking participants was English, the original English questionnaires were administered and completed (i.e., no translation processes were necessary).

7.6.3 Internal consistencies of the questionnaires. As the APRI-BT, CRPBI-30, and IPPA-R for Children questionnaires were translated into Afrikaans, it was deemed necessary to determine the internal consistency (reliability) of the translated questionnaires by calculating the Cronbach α -coefficients. It was also essential to determine the internal consistencies for each of the original English questionnaires that were completed by the Southern Sotho ethnic group because this was the first time (according to a database search of EBSCOhost on 15 May 2014) that all of these original English measures would be administered to a preadolescent sample of Free State learners, and secondly because the Southern Sotho-speaking participants ($n = 465$) did not complete the questionnaires in their home language. Analyses were conducted using Version 23 of the Statistical Package for the Social Sciences (SPSS) software. The results of these analyses are reported in Table 6.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 6

Cronbach α -coefficients for APRI-BT, CRPBI-30, and IPPA-R for Children for the Entire Sample and by Ethnic Group

Scale or subscale of measuring instrument	Entire Sample (N = 1078)	Black Southern Sotho (n = 465)	White Afrikaans (n = 613)
APRI bullying perpetration:			
Physical	0.768	0.748	0.771
Verbal	0.839	0.821	0.795
Social-relational	0.748	0.754	0.719
Cyber	0.777	0.750	0.823
APRI bullying victimisation:			
Physical	0.850	0.815	0.866
Verbal	0.882	0.855	0.895
Social-relational	0.850	0.815	0.879
Cyber	0.785	0.722	0.818
CRPBI-30:			
Acceptance	0.856	0.856	0.857
Firm control	0.597	0.617	0.589
Psychological control	0.764	0.663	0.723
IPPA-R for Children:			
Communication	0.794	0.812	0.769
Trust	0.841	0.849	0.811
Alienation	0.774	0.718	0.790

It is evident from Table 6 that all α -coefficients, with the exception of that of the Firm Control scale, exhibit relatively acceptable levels of internal consistency that range between 0.663 and 0.895. According to Foster and Parker (1999), it is expected that noncognitive measures will yield lower reliability coefficients compared to cognitive measures; thus, it would still be acceptable to include scales with coefficients lower than 0.8. Therefore, although the Firm Control scale exhibited lower levels of internal consistency, all scales were still included in subsequent analyses. The statistical procedures used to analyse each research hypothesis are discussed in the following section.

7.7 Statistical Procedures

7.7.1 Research Hypothesis 1. The first research hypothesis postulates that perceived parenting dimensions would explain a significant percentage of the variance in different types of bullying perpetration and victimisation.

To examine the first formulated research hypothesis, hierarchical regression analyses were conducted (Howell, 2013). In the current study, perceived parenting dimensions (acceptance, firm control, and psychological control) served as the independent variables, whereas the dependent variables—forms of bullying—were measured by way of bullying perpetration and victimisation. As outlined in the literature review, bullying can take on various forms. For the purposes of this study, physical, verbal, social-relational, and cyberbullying were the types of bullying that were investigated.

The procedure that was followed firstly involved calculating the total variance in the different forms of bullying perpetration and victimisation that was explained collectively by the independent variables (i.e., all three perceived parenting scales). Thereafter, the unique contribution of each individual independent variable explaining the variance in the dependent variable (e.g., physical bullying perpetration) was investigated. The percentage of the variance that is explained by a specific independent variable is denoted by R^2 (coefficient of determination). To determine further whether the contribution of a specific independent variable to the R^2 value was statistically significant, a hierarchical F -test was used.

Prior to testing the potential intervening effect of attachment on the relationships between perceived parenting dimensions and bullying (Research Hypothesis 2), multiple regression analyses were conducted to test for the possible effect of gender and ethnicity. According to the literature (e.g., Barnett & Scaramella, 2013; Boel-Studt & Renner, 2013; Shapka & Law, 2013), the influence of parenting dimensions on preadolescent bullying may vary, depending on the preadolescent's gender and/or ethnic group. Therefore, these analyses would determine whether subsequent investigations should be conducted for the group as a whole, or for each gender and ethnic group separately. Dummy variables were constructed to utilise the categorical data in the analyses. For both biographical variables (each comprising two categories), a single dummy variable was constructed, with 1 and 0 representing the two categories (Gender: 1 = boy, 0 = girl; Ethnicity: 1 = white Afrikaans, 0 = black Southern Sotho). In these analyses, the different forms of bullying served as the dependent variables,

whereas the perceived parenting dimensions (total score) functioned as the independent variables.

7.7.2 Research Hypothesis 2. The second research hypothesis postulates that attachment will influence the relationship between each perceived parenting dimension and bullying perpetration or victimisation. After the first research hypothesis had been investigated, the potential role of the intervening variable (i.e., parent-child attachment) in the relationships between perceived parenting dimensions and bullying was examined. More specifically, analyses were conducted to determine whether parent-child attachment mediated or moderated the relationship between the independent and dependent variables. An intervening variable functions as a mediator to the extent that it is able to explain or account for the relation between a predictor and criterion variable. In contrast, a moderator variable affects the direction and/or strength of a correlation between the independent (predictor) and dependent (criterion) variables (Baron & Kenny, 1986). Mediation and moderation are considered causal models, referring to the theoretical hypotheses about how changes in one variable lead to changes in the other variable. As argued by Wu and Zumbo (2008), “even if the data does not permit a causal conclusion (e.g., cross-sectional or non-experimental data), mediation and moderation models are, by nature, causal models because the underlying theories suggest directional inferences that are intrinsically causal” (p. 368). Moderator hierarchical multiple regression analyses were employed to investigate the potential effect of the intervening variable on the relationship between the independent variable (perceived parenting dimension) and dependent variable (bullying perpetration or victimisation). During Step 1, two analyses were conducted: In the first analysis, one of the independent variables (e.g., perceived parental acceptance) was added to the regression equation to determine its unique contribution. During the second analysis of Step 1, the unique contribution of the intervening variable (attachment) to the regression equation was determined by adding this variable to the equation (while perceived parental acceptance was left out). During Step 2, both the independent (perceived parental acceptance) and intervening (attachment) variables were added to the equation. In this way, the significant *proportionate* contribution of each of the predictor variables to the prediction of the criterion variable (bullying) can be determined. In Step 3, the *product* of the independent variable (perceived parental acceptance) and the intervening variable (attachment), in the prediction of bullying, was examined. When working with the product of two variables (Step 3), it is important to prevent multicollinearity (Howell, 2013). Therefore, deviation scores of the involved variables (observed score minus the mean)

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

were calculated, after which the product between these two sets of deviation scores was calculated. This procedure of analyses will now be discussed in more detail.

Step 1 determined whether perceived parenting dimensions (e.g., perceived parental acceptance) and attachment were respectively and significantly related to various forms of bullying perpetration and victimisation. As the variables were added to the equation, one of the following deductions could be made:

- (1) If the calculated Beta-coefficient of perceived parental acceptance proves to be significant in Step 1, but it becomes non-significant in Step 2 (when attachment forms part of the equation), it can be concluded that attachment serves as a mediator variable in the specific relationship between perceived parental acceptance and a particular type of bullying.
- (2) If the calculated Beta-coefficient of attachment proves to be significant in Step 1, but it becomes non-significant in Step 2, it is an indication of a confounding effect between the variables (Gravetter & Wallnau, 2000).
- (3) If the calculated Beta-coefficient of the product term (Step 3) proves to be significant, it can be concluded that there is a significant interaction, thus indicating a moderator effect (Howell, 2013).

The statistical procedure to examine Hypothesis 2 is depicted visually in Table 7.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 7

Outline of the Moderated Hierarchical Multiple Regression Analysis

Step	Predictor	Result	Deduction
1	Parenting dimension	Significant	Direct effect on bullying
Alt 1	Attachment	Significant	Direct effect on bullying
2	Parenting dimension	Non-significant	Mediator: The calculated <i>Beta</i> -coefficient of the parenting dimension is significant in step 1, but it becomes non-significant in step 2
	Attachment	Significant	
	Parenting dimension	Significant	Confounding: The calculated <i>Beta</i> -coefficient of attachment is significant in step 1, but it becomes non-significant in step 2
	Attachment	Non-significant	
3	Product: Parenting dimension & attachment ^a	Significant	Moderator

^aWhen the product-term was used in step 3, deviation scores were used to prevent multicollinearity.

7.7.3 Research Hypothesis 3. Research Hypothesis 3 postulates that there will be statistically significant differences in the means of bullying perpetration and victimisation between respective gender and ethnic groups.

The bullying experiences of the two genders, as well as the ethnic groups (main effects and interaction) were examined and compared. It is clear that more than one independent variable and dependent variables were involved, and according to Howell (2013), the appropriate statistical procedure is a MANOVA. With MANOVA analyses, statistical inferences are based on three assumptions, namely that

- the data set has to originate from a multivariate normal population;
- with equal subgroup covariance matrices; and
- the subgroups are a collection of various independent data sets (Du Toit & Stumpf, 1982).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

If the data set satisfied all three assumptions and a significant result (F -value) was found, then one-way ANOVAs would be conducted with each of the dependent variables. Seeing that the interaction between gender and ethnicity (four groups) comprised more than two subgroups, the Scheffé procedure was used to determine in which of the four subgroups the mean scores of the dependent variable differed significantly statistically. When the dependent variables correlate with each other, Field (2013) recommends using a more conservative level of significance, namely $5/4 = 1.25\%$ (0.0125) or $1/4 = 0.25\%$ (0.0025), when four dependent variables (as in this case) are involved.

Finally, the practical importance of the results was examined to determine whether any of the statistically significant results possibly found in the analyses were meaningful. Therefore, effect sizes were calculated as a measure of practical importance (Steyn, 1999). These effect sizes can be calculated for different statistical techniques, as seen in this study. When the significance of an increase in R^2 is being investigated (as in the first research hypothesis), it is also deemed necessary to determine the effect size of the contribution made by a specific independent variable. This effect size gives an indication of the contribution to R^2 in terms of the proportion unexplained variance of the full model. Thus, the effect size is calculated as $(R^2 - R_1^2) / (1 - R^2)$, where R^2 and R_1^2 represent the total variance of the full and reduced models respectively. The values (f^2) provided by Cohen (in Steyn, 1999) can be used as guidelines in regression analyses, namely that (a) 0.01 = small effect, (b) 0.15 = medium effect, and (c) 0.35 = large effect. Instead, the following guiding values (f) can be used when comparing more than two population means (as in Research Hypothesis 3) by using a one-way analysis of variance (ANOVA), including (a) 0.1 = small effect, (b) 0.25 = medium effect, and (c) 0.4 = large effect.

Hierarchical regression analyses were conducted to examine Research Hypothesis 1, whereas Research Hypothesis 2 was investigated using a moderated hierarchical multiple regression analysis. Research Hypothesis 3 was investigated by means of a MANOVA. All analyses were conducted using SPSS software. Both the 1% and 5% levels of significance were utilised in this study.

7.7.4 Treatment of missing data. Even though participants were encouraged to complete the items as the researcher or assistant read each item aloud, it was inevitable that participants would leave out or miss some questions. Therefore, any missing values were replaced with the median of the corresponding item.

7.8 Chapter Summary

To ensure that the current research study was conducted ethically, the researcher adhered to the ethical principles of beneficence, non-maleficence, autonomy, confidentiality, justice, fidelity, and integrity during the entire research process. The three research objectives were achieved by utilising a quantitative and non-experimental type of study. Whereas the first two hypotheses made use of a correlational research design, the third hypothesis involved a criterion group research design. After ethical clearance had been obtained from the appropriate authorities, a multiethnic sample of 1078 preadolescents was obtained from twenty-four primary schools across the Free State. Participants completed four questionnaires, including a biographical questionnaire and three measuring instruments for assessing bullying (APRI-BT), perceived parenting dimensions (CRPBI-30), and parent-child attachment (IPPA-R for Children). Whereas the black Southern Sotho-speaking participants completed English versions of all the measures, the white Afrikaans-speaking participants completed the questionnaires in Afrikaans. During the data-collection process, several challenges emerged that were dealt with appropriately. Cronbach alpha coefficients were calculated for both the English and Afrikaans versions of the questionnaires to ensure acceptable levels of internal consistency. Hierarchical regression analyses, moderated hierarchical multiple regression analyses, and analyses of variance were conducted with each of the three research hypotheses respectively, in which effect sizes were calculated as a measure of practical importance. Finally, missing data were treated by imputing the median for the corresponding item. After discussing how the research participants and data were obtained, the next chapter focuses on the results of these analyses.

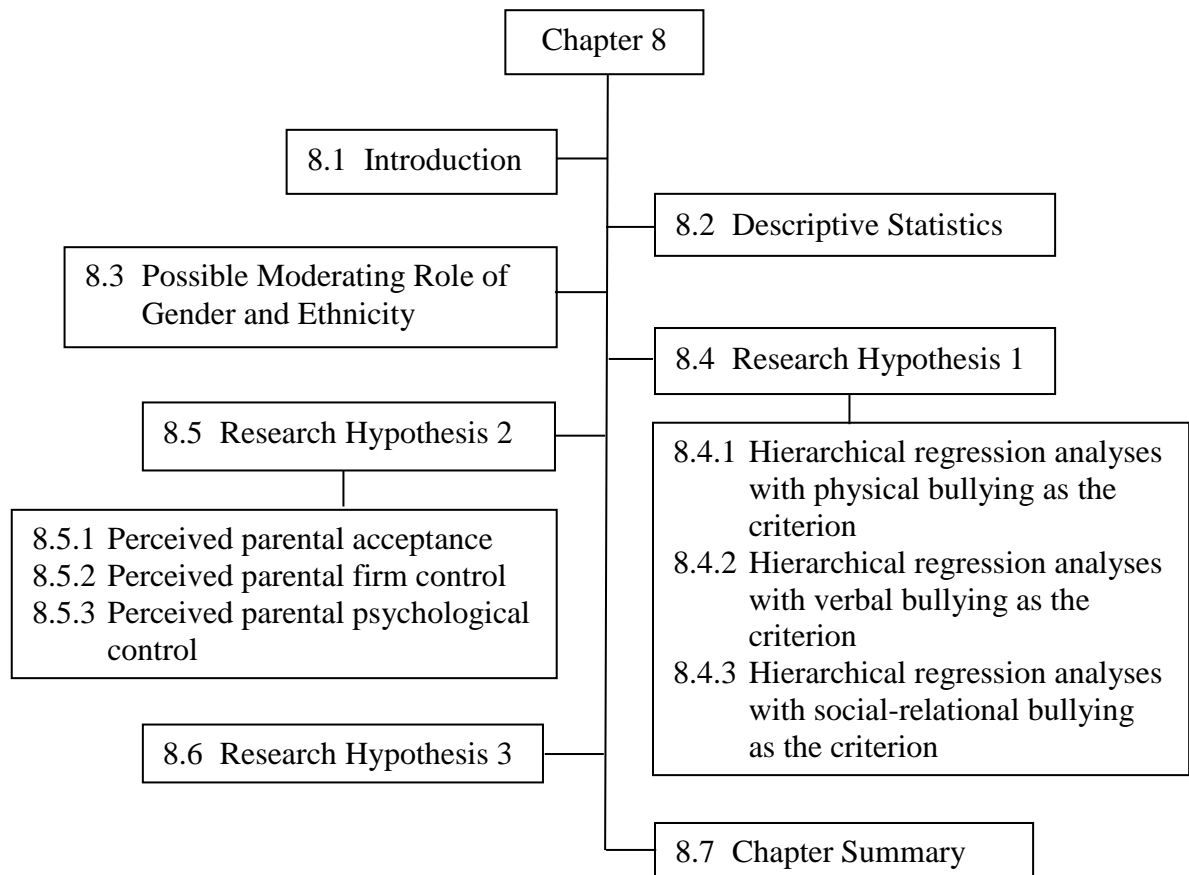
Chapter 8: Results

Figure 12. Outline of Chapter 8.

8.1 Introduction

This chapter begins with a discussion of the descriptive statistics for the entire sample. These include the minimum and maximum values, the means and standard deviations, as well as the skewness and kurtosis indices for each variable. Next, the results for the correlations between the independent and dependent variables are presented, whereafter the results of the multiple regression analyses for the effects of gender and ethnicity are given. Subsequently, an overview of the results of the hierarchical regression analyses for Research Hypothesis 1 are provided, followed by the results of the moderated hierarchical multiple regression analyses conducted for Research Hypothesis 2. Finally, the MANOVA, as well as ANOVA results for Research Hypothesis 3 are presented and discussed. The chapter outline is depicted visually in Figure 12.

8.2 Descriptive Statistics

The guidelines provided by Brown (2012) were used to interpret the skewness- and kurtosis indices. With regard to the skewness of a distribution, these guidelines state that if skewness is

- smaller than -1.0 or larger than +1.0, the distribution is severely skewed;
- between -1.0 and -½ or between +½ and +1.0, the distribution is moderately skewed;
- between -½ and +½, the distribution is moderately symmetrical; and
- equal to 0, the distribution is normal.

To be able to comment on the kurtosis index, it is important to determine the excess kurtosis value (kurtosis -3). In other words, if a distribution is normally distributed, then the kurtosis value will be equal to 3, so that $(3 - 3 = 0)$ indicates that the excess kurtosis value is null. If the excess kurtosis is a negative value, it means that the distribution is flatter than a normal distribution (platykurtosis). In contrast, a positive excess kurtosis value denotes a distribution with a much higher peak (leptokurtosis). Excess kurtosis values smaller than -2.0 or larger than +2.0 characterise very flat or very peaked distributions.

Table 8 presents the descriptive statistics (i.e., minimum and maximum values, means, and standard deviation, skewness, and kurtosis values) for the entire sample in terms of all the variables involved in this study.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 8

Minimum and Maximum Values, Means, Standard Deviation, Skewness, and Kurtosis for the Entire Sample (N=1078)

	Min	Max	Mean	SD	Skewness	Kurtosis
Bullying						
Physical bullying (perp)	6	34	10.12	4.69	1.007	1.681
Physical bullying (victim)	6	36	14.15	6.99	1.105	0.664
Verbal bullying (perp)	6	36	11.50	5.69	1.047	1.761
Verbal bullying (victim)	6	36	16.31	8.06	0.783	-0.372
Social-relational bullying (perp)	6	35	9.08	4.04	1.198	1.898
Social-relational bullying (victim)	6	36	12.07	6.60	1.584	2.123
Cyberbullying (perp)	8	38	8.67	2.37	6.119	47.839
Cyberbullying (victim)	8	41	9.37	3.47	4.169	21.980
Perceived parenting dimension						
Acceptance	10	30	26.58	3.80	-1.015	2.155
Firm control	12	30	20.86	3.07	0.128	0.287
Psychological control	10	30	17.85	4.17	0.380	-0.467
Attachment						
	-3	37	28.66	7.32	-1.169	1.988

Note. perp = perpetration; victim = victimisation; Min = Minimum value; Max = Maximum value; SD = Standard Deviation. A score of 0 is not possible in some of the scales.

It is evident from Table 8 that all variables, with the exception of two (i.e., cyberbullying perpetration and victimisation) displayed acceptable levels of skewness and kurtosis. The very high skewness values for both cyberbullying variables indicate that the data are positively skewed, in that the majority of participants obtained low scores. Additionally, the very high kurtosis values for both cyberbullying variables suggest that the data peaked severely (i.e., the majority of participants indicated the same value). Consequently, both cyberbullying variables (i.e., cyberbullying perpetration and victimisation) were not included in follow-up analyses.

Prior to conducting regression analyses, the correlations between all the independent and dependent variables were calculated using Pearson product-moment correlation coefficients. These results are presented in Table 9.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 9

Correlations between Variables for the Entire Sample (N = 1078)

Variable	Physical		Verbal		Social-relational		Attachment
	Perp	Victim	Perp	Victim	Perp	Victim	
Acceptance	-.16**	-.16**	-.18**	-.18**	-.15**	-.14**	.76**
Firm control	.09*	.14**	.13**	.17**	.03	.14**	-.33**
Psychological control	.24**	.30**	.31**	.30**	.22**	.24**	-.41**
Attachment	-.22**	-.23**	-.27**	-.26**	-.20**	-.19**	-

Note. Perp = Perpetration; Victim= Victimization.

* $p \leq .05$. ** $p \leq .01$.

It is evident from Table 9 that the correlations between perceived parental acceptance and all three forms of bullying perpetration and victimisation (physical, verbal, and social-relational), as well as the correlations between perceived parental psychological control and all three forms of bullying perpetration and victimisation, were significant at the 1% level. In addition to all three types of perceived parenting dimensions, attachment also correlated significantly (at the 1% level) with all three forms of bullying perpetration and victimisation. However, it should be noted that firm control did not correlate significantly with social-relational bullying perpetration, while a significant relationship between firm control and physical bullying perpetration was found only at the 5% level. According to indices of practical significance, only correlations of 0.3 present with medium effect sizes. Therefore, even though several statistically significant correlations were found, only a number of these coefficients presented with medium effect sizes. A correlation matrix examining the relationships amongst all the major variables (i.e. bullying, perceived parenting dimensions, attachment, gender, and ethnicity) can be found in Appendix I.

Before proceeding to the analyses of the research hypotheses, the potential effect of (a) gender and (b) ethnicity on the relationships between the independent variables (perceived parenting dimensions) and the dependent variables (bullying perpetration and victimisation) were investigated. These results are presented and discussed in the next section. Seeing that perceived parenting dimensions and bullying were measured by means of several variables, the effect of the two biographical variables (gender and ethnicity) on each of the relations was examined separately.

8.3 Possible Moderating Role of Gender and Ethnicity

As already discussed, multiple regression analyses were conducted to test for the possible effect of gender (Model 2a) and ethnicity (Model 2b), with results appearing in Table 10. Seeing that literature reports that the effects of parenting dimensions on bullying outcomes may vary according to these two demographic variables (as discussed in Chapter 4), it was imperative to investigate whether these would moderate the association between parenting and bullying. If so, all subsequent analyses were conducted for each gender and ethnic group separately. As each of the respective bullying subscales was analysed separately, these variables are presented in the first column of Table 10.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 10

Moderating Effect of Gender and Ethnicity in the Relationships between Perceived Parenting Dimensions and Different Forms of Bullying

Dependent variable: Bullying	Model ^a	R	R ²	Adjusted R ²	Change statistics				Sig F Change	f ²
					R ² change	F change	df 1	df 2		
Physical (perp)	1	0.259	0.067	0.065	0.067	25.825	3	1074	0.000	
	2a	0.291	0.085	0.081	0.017	20.217**	1	1073	0.000	0.02
	1	0.259	0.067	0.065	0.067	25.825	3	1074	0.000	
	2b	0.294	0.087	0.083	0.019	22.678**	1	1073	0.000	0.02
Physical (victim)	1	0.309	0.096	0.093	0.096	37.862	3	1074	0.000	
	2a	0.310	0.096	0.093	0.001	0.710	1	1073	0.400	
	1	0.309	0.096	0.093	0.096	37.862	3	1074	0.000	
	2b	0.330	0.109	0.106	0.013	16.239**	1	1073	0.000	0.01
Verbal (perp)	1	0.320	0.102	0.100	0.102	40.871	3	1074	0.000	
	2a	0.330	0.109	0.106	0.007	7.874**	1	1073	0.005	0.01
	1	0.320	0.102	0.100	0.102	40.871	3	1074	0.000	
	2b	0.420	0.177	0.174	0.074	96.823**	1	1073	0.000	.09

Note. perp = perpetration; victim = victimisation.

^aModel 1 = Perceived Parenting scales; Model 2a = Perceived Parenting scales + Gender; Model 2b = Perceived Parenting scales + Ethnicity.

* $p \leq .05$. ** $p \leq .01$.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 10 (continued)

Moderating Effect of Gender and Ethnicity in the Relationships between Perceived Parenting Dimensions and Different Forms of Bullying

Dependent variable: Bullying	Model ^a	R	R ²	Adjusted R ²	Change statistics				Sig F Change	f ²
					R ² change	F change	df 1	df 2		
Verbal (victim)	1	0.318	0.101	0.098	0.101	40.182	3	1074	0.000	
	2a	0.322	0.104	0.100	0.003	3.120	1	1073	0.078	
	1	0.318	0.101	0.098	0.101	40.182	3	1074	0.000	
	2b	0.344	0.118	0.115	0.017	21.247**	1	1073	0.000	0.02
Social-relational (perp)	1	0.250	0.063	0.060	0.063	23.822	3	1074	0.000	
	2a	0.255	0.065	0.061	0.002	2.640	1	1073	0.104	
	1	0.250	0.063	0.060	0.063	23.822	3	1074	0.000	
	2b	0.265	0.070	0.067	0.008	8.746**	1	1073	0.003	0.01
Social-relational (victim)	1	0.254	0.064	0.062	0.064	24.610	3	1074	0.000	
	2a	0.283	0.080	0.077	0.016	18.420**	1	1073	0.000	0.02
	1	0.254	0.064	0.062	0.064	24.610	3	1074	0.000	
	2b	0.262	0.069	0.065	0.004	4.886*	1	1073	0.027	0.01

Note. perp = perpetration; victim = victimisation.

^aModel 1 = Perceived Parenting scales; Model 2a = Perceived Parenting scales + Gender; Model 2b = Perceived Parenting scales + Ethnicity.

* $p \leq .05$. ** $p \leq .01$.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The aim of the analysis was to determine whether there would be a significant increase in R^2 with the addition of either gender or ethnicity to regression Model 1 (in which perceived parenting scales solely formed part of the equation). This increase was evaluated in terms of both statistical significance and practical importance (effect size).

To determine whether any increases observed in R^2 are of practical importance, the following values can serve as a guide (f^2) in regression analyses, namely that (a) 0.01 = small effect; (b) 0.15 = medium effect; and (c) 0.35 = large effect. It is evident from Table 10 that there was a statistically significant increase (at the 1% level) in R^2 with the addition of gender, for the relations between perceived parenting dimensions and bullying, which included

- physical bullying (perpetration) $\Delta R^2 = .017$; $F(1;1073) = 20.217$; $p = .000$;
- verbal bullying (perpetration) $\Delta R^2 = .007$; $F(1;1073) = 7.874$; $p = .005$; and
- social-relational bullying (victimisation) $\Delta R^2 = .016$; $F(1;1073) = 18.420$; $p = .000$.

Furthermore, Table 10 illustrates how the addition of ethnicity resulted in a statistically significant increase (at the 1% level) in R^2 for the relations between perceived parenting dimensions and bullying, which included

- physical bullying (perpetration) $\Delta R^2 = .019$; $F(1;1073) = 22.678$; $p = .000$;
- physical bullying (victimisation) $\Delta R^2 = .013$; $F(1;1073) = 16.239$; $p = .000$;
- verbal bullying (perpetration) $\Delta R^2 = .074$; $F(1;1073) = 96.823$; $p = .000$;
- verbal bullying (victimisation) $\Delta R^2 = .017$; $F(1;1073) = 21.247$; $p = .000$; and
- social-relational bullying (perpetration) $\Delta R^2 = .008$; $F(1;1073) = 8.746$; $p = .003$.

Although all of these values were statistically significant, their respective effect sizes (f^2) ranged from small to very small. Thus, it can be concluded that gender and ethnicity do not exert important influences on the aforementioned correlations, and all subsequent analyses will be conducted for the sample as a whole.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The following section presents the results of the hierarchical regression analyses that were conducted for Research Hypothesis 1. Firstly, the results for physical bullying perpetration and victimisation (as criterion variables) are presented, followed by the results for verbal bullying perpetration and victimisation. Concluding the discussion are the findings for social-relational bullying perpetration and victimisation.

8.4 Research Hypothesis 1

This hypothesis inquires whether perceived parenting dimensions can account for a significant percentage of the variance in preadolescent bullying perpetration and victimisation (physical, verbal, and social-relational).

8.4.1 Hierarchical regression analyses with physical bullying as the criterion. The following two tables (Table 11 and Table 12) respectively present the percentage of the variance in physical bullying perpetration and victimisation that is accounted for by the combined, as well as the individual perceived parenting dimensions. These results are discussed next. Table 11 presents the results for physical bullying perpetration.

Table 11

Contributions of Perceived Parenting Dimensions to R^2 with Physical Bullying Perpetration as Criterion

Variables in equation	Variable omitted	R^2	Contribution to R^2	F	f^2
1. Accept+psych+firm		0.067			
2. Accept+psych	Firm	0.067	1-2=0.000	-	-
3. Accept+firm	Psych	0.026	1-3=0.041	47.020**	0.04
4. Psych+firm	Accept	0.058	1-4=0.009	10.321**	0.01

Note. Accept = Acceptance; psych = psychological control; firm = firm control.

* $p \leq .05$. ** $p \leq .01$.

It is evident from Table 11 that the three parenting scales collectively explain 6.7% ($R^2 = .067$) of the variance in physical bullying perpetration. This calculated R^2 value was significant at the 1% level ($F_{3;1074} = 25.824$; $p = .000$). Furthermore, it is clear that psychological control (on its own) accounted for 4.1% of the variance in physical bullying perpetration. Although this percentage was significant at the 1% level ($F_{1;1075} = 47.020$; $p \leq 0.01$), the corresponding effect size ($f^2 = 0.04$) indicated that this result was not of practical importance. The results from Table 11 also show that perceived parental acceptance

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

accounted for a statistically significant percentage (at the 1% level) of the variance in physical bullying perpetration. However, when compared to the percentage of the variance accounted for by psychological control, this result appeared to be much smaller and therefore was not investigated any further. Table 12 presents the results for physical bullying victimisation.

Table 12

Contributions of Perceived Parenting Dimensions to R^2 with Physical Bullying Victimisation as Criterion

Variables in equation	Variable omitted	R^2	Contribution to R^2	F	f^2
1. Accept+psych+firm		0.096			
2. Accept+psych	Firm	0.095	1-2=0.001	1.184	0.01
3. Accept+firm	Psych	0.033	1-3=0.063	74.569**	0.07
4. Psych+firm	Accept	0.090	1-4=0.006	7.102**	0.01

Note. Accept = Acceptance; psych = psychological control; firm = firm control.

* $p \leq .05$. ** $p \leq .01$.

It is evident from Table 12 that the three parenting scales collectively explained 9.6% ($R^2 = .096$) of the variance in physical bullying victimisation. This calculated R^2 value was significant at the 1% level ($F_{3;1074} = 37.862$; $p = .000$). Furthermore, it is clear that psychological control (on its own) accounted for 6.3% of the variance in physical bullying victimisation. Although this percentage was significant at the 1% level ($F_{1;1075} = 74.569$; $p \leq 0.01$), the corresponding effect size ($f^2 = 0.07$) indicates that this result is not of practical importance. The results from Table 12 also show that perceived parental acceptance accounted for a statistically significant percentage (at the 1% level) of the variance in physical bullying victimisation. However, when compared to the percentage of the variance accounted for by psychological control, this result appeared to be much smaller and therefore would not be investigated further.

8.4.2 Hierarchical regression analyses with verbal bullying as the criterion.

Tables 13 and 14 present and describe the percentage of the variance in verbal bullying perpetration (followed by verbal bullying victimisation) that was accounted for by the combined, as well as individual perceived parenting dimensions. These results are discussed next. Table 13 presents the results for verbal bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 13

Contributions of Perceived Parenting Dimensions to R^2 with Verbal Bullying Perpetration as Criterion

Variables in equation	Variable omitted	R^2	Contribution to R^2	F	f^2
1. Accept+psych+firm		0.102			
2. Accept+psych	Firm	0.102	1-2=0.000	-	-
3. Accept+firm	Psych	0.037	1-3=0.065	77.449**	0.07
4. Psych+firm	Accept	0.094	1-4=0.008	9.532**	0.01

Note. Accept = Acceptance; psych = psychological control; firm = firm control.

* $p \leq .05$. ** $p \leq .01$

It is evident from Table 13 that the three parenting scales collectively explained 10.2% ($R^2 = .102$) of the variance in verbal bullying perpetration. This calculated R^2 value was significant at the 1% level ($F_{3;1074} = 40.871$; $p = .000$). Furthermore, it is clear that psychological control (on its own) accounted for 6.5% of the variance in verbal bullying perpetration. Although this percentage was significant at the 1% level ($F_{1;1075} = 77.449$; $p \leq 0.01$), the corresponding effect size ($f^2 = 0.07$) indicated that this result was not of practical importance. It was again shown that perceived parental acceptance accounted for a statistically significant percentage (at the 1% level) of the variance in verbal bullying perpetration. However, when compared to the percentage of the variance accounted for by psychological control (0.8% versus 6.5%), this result was much smaller and therefore was not investigated further. Table 14 presents the results for verbal bullying victimisation.

Table 14

Contributions of Perceived Parenting Dimensions to R^2 with Verbal Bullying Victimisation as Criterion

Variables in equation	Variable omitted	R^2	Contribution to R^2	F	f^2
1. Accept+psych+firm		0.101			
2. Accept+psych	Firm	0.099	1-2=0.002	2.380	0.01
3. Accept+firm	Psych	0.045	1-3=0.056	66.652**	0.06
4. Psych+firm	Accept	0.095	1-4=0.006	7.141**	0.01

Note. Accept = Acceptance; psych = psychological control; firm = firm control.

* $p \leq .05$. ** $p \leq .01$.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

From Table 14, it is clear that the three parenting scales collectively explained 10.1% ($R^2 = 0.101$) of the variance in verbal bullying victimisation. This calculated R^2 value was significant at the 1% level ($F_{3;1074} = 40.182$; $p = 0.000$). Furthermore, psychological control (on its own) accounted for 5.6% of the variance in verbal bullying victimisation. Even though this percentage was significant at the 1% level ($F_{1;1075} = 66.652$; $p \leq 0.01$), the corresponding effect size ($f^2 = 0.06$) indicated that this result was not of practical importance. Perceived parental acceptance also accounted for a statistically significant percentage (at the 1% level) of the variance in verbal bullying victimisation. However, the result was much smaller than that found for parental psychological control; therefore, it was not investigated further.

8.4.3 Hierarchical regression analyses with social-relational bullying as the criterion. Tables 15 and 16 present and describe the percentage of the variance in social-relational bullying perpetration (followed by social-relational bullying victimisation) that was accounted for by the combined and the individual perceived parenting dimensions. Table 15 presents the results for social-relational bullying perpetration.

Table 15

Contributions of Perceived Parenting Dimensions to R^2 with Social-relational Bullying Perpetration as Criterion

Variables in equation	Variable omitted	R^2	Contribution to R^2	F	f^2
1. Accept+psych+firm		0.063			
2. Accept+psych	Firm	0.056	1-2=0.007	7.994**	0.01
3. Accept+firm	Psych	0.023	1-3=0.040	45.678**	0.04
4. Psych+firm	Accept	0.050	1-4=0.013	14.845**	0.01

Note. Accept = Acceptance; psych = psychological control; firm = firm control.

* $p \leq .05$. ** $p \leq .01$.

Firstly, it is evident from Table 15 that the three parenting scales collectively explained 6.3% ($R^2 = .063$) of the variance in social-relational bullying perpetration. This calculated R^2 value was significant at the 1% level ($F_{3;1074} = 23.882$; $p = 0.000$). Whereas psychological control (on its own) accounted for 4.0% of the variance in social-relational bullying perpetration, while perceived parental firm control and acceptance explained 0.7% and 1.3% respectively. These percentages were much smaller than those obtained for psychological control, and therefore were not examined further. Table 16 presents the results for social-relational bullying victimisation.

Table 16

Contributions of Perceived Parenting Dimensions to R² with Social-relational Bullying Victimization as Criterion

Variables in equation	Variable omitted	R ²	Contribution to R ²	F	f ²
1. Accept+psych+firm		0.064			
2. Accept+psych	Firm	0.062	1-2=0.002	2.286	0.01
3. Accept+firm	Psych	0.030	1-3=0.034	38.867**	0.04
4. Psych+firm	Accept	0.061	1-4=0.003	3.429	0.01

Note. Accept = Acceptance; Psych = Psychological control; Firm = Firm control.

* $p \leq .05$. ** $p \leq .01$.

From Table 16, it is clear that the three parenting scales collectively explained 6.4% ($R^2 = .064$) of the variance in social-relational bullying victimisation. This calculated R^2 value was significant at the 1% level ($F_{3;1074} = 24.610$; $p = .000$). Furthermore, psychological control (on its own) accounted for 3.4% of the variance in social-relational bullying victimisation. Even though this percentage of the variance was significant at the 1% level ($F_{1;1075} = 38.867$; $p \leq 0.01$), the corresponding effect size ($f^2 = 0.04$) indicated that this result was not of practical importance; therefore, it was not investigated further.

In the next section, Research Hypothesis 2 is investigated by means of moderator hierarchical multiple regression analyses. Firstly, the discussion focuses on the relationships of perceived parental acceptance with each of the three types of bullying perpetration (physical, verbal, and social-relational), followed by the equivalent three forms of victimisation. Similarly, the associations of perceived parental firm control, followed by perceived parental psychological control with each type of bullying perpetration and victimisation, are examined.

8.5 Research Hypothesis 2

The second research hypothesis investigated the role of attachment in the relationships between perceived parenting dimensions (acceptance, firm control, and psychological control), the three forms of bullying perpetration, as well as victimisation (physical, verbal, and social-relational).

8.5.1 Perceived parental acceptance. Firstly, the role of attachment in the relationship between perceived parental acceptance and the various forms of bullying

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

perpetration (and victimisation) was investigated. In Table 17, the results of attachment as an intervening variable in the relation between perceived parental acceptance and physical bullying perpetration are provided.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 17

Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Physical Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	15.311	0.998		15.336	0.000	27.616	0.158	0.025	0.024
Accept	-0.195	0.037	-0.158	-5.255	0.000				
1b (Constant)	14.197	0.564		25.188	0.000	55.806	0.222	0.049	0.048
Attach	-0.142	0.019	-0.222	-7.470	0.000				
2. (Constant)	13.773	1.029		13.391	0.000	28.005	0.223	0.050	0.048
Accept	0.028	0.056	0.022	0.492	0.622				
Attach	-0.153	0.029	-0.239	-5.264	0.000				
3. (Constant)	15.827	1.365		11.598	0.000	20.482	0.233	0.054	0.051
Accept	-0.026	0.061	-0.021	-0.434	0.665				
Attach	-0.169	0.030	-0.263	-5.654	0.000				
Accept x Attach	-0.009	0.004	-0.069	-2.284	0.223				

Note. Accept = Acceptance; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

It is apparent from Models 1a and 1b (Table 17) that the results for both perceived parental acceptance and attachment were significant at the 1% level. Thus, it can be concluded that perceived parental acceptance had a direct influence on physical bullying perpetration. In terms of the intervening variable (attachment), the results showed that it also had a direct influence on preadolescents' physical bullying perpetration—independent of the influence of perceived parental acceptance.

In Model 2, both perceived parental acceptance and attachment were added to the regression equation. The subsequent result indicated that the relationship between perceived parental acceptance and physical bullying perpetration became insignificant, whilst the association between attachment and physical bullying perpetration remained significant at the 1% level. Such results would designate attachment as a mediator variable in the relationship between perceived parental acceptance and physical bullying perpetration. No significant product term was obtained in Model 3 ($\beta = -0.069$; $p = .223$), indicating that attachment failed to moderate the relationship between perceived parental acceptance and physical bullying perpetration. To investigate the mediator effect further, a regression analysis was done to determine the relationship between perceived parental acceptance and attachment. These relationships are depicted visually in Figure 13.

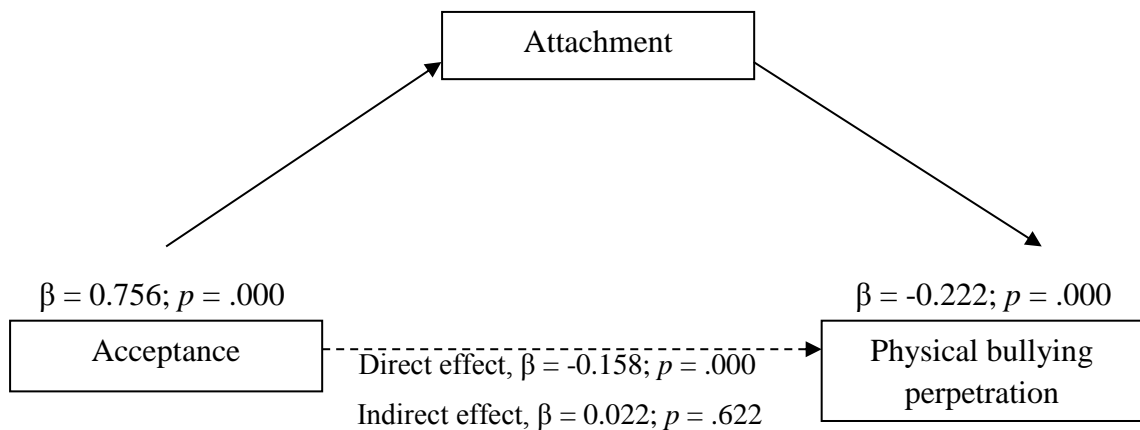


Figure 13. The mediating effect of attachment in the relationship between perceived parental acceptance and physical bullying perpetration.

From Figure 13, it can be concluded that there was a significant positive relationship ($\beta = 0.756$) between perceived parental acceptance and attachment, with attachment in turn demonstrating a significant negative relationship ($\beta = -0.222$) with physical bullying perpetration. This suggests that the higher the level of parental acceptance perceived by

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

preadolescents, the more inclined they were to experience a high-quality attachment bond with their caregivers, which in turn resulted in lower levels of physical bullying perpetration.

The results for the intervening effect of attachment in the relationship between perceived parental acceptance and physical bullying victimisation are depicted in Table 18.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 18

Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Physical Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	22.120	1.488		14.869	0.000	29.288	0.163	0.026	0.026
Accept	-0.300	0.055	-0.163	-5.412	0.000				
1b (Constant)	20.284	0.840		24.142	0.000	56.760	0.224	0.050	0.049
Attach	-0.214	0.028	-0.224	-7.534	0.000				
2. (Constant)	19.865	1.533		12.956	0.000	28.410	0.224	0.050	0.048
Accept	0.027	0.084	0.015	0.326	0.744				
Attach	-0.225	0.043	-0.235	-5.180	0.000				
3. (Constant)	21.912	2.037		10.757	0.000	19.739	0.229	0.052	0.050
Accept	-0.026	0.091	-0.014	-0.292	0.770				
Attach	-0.240	0.045	-0.251	-5.393	0.000				
Accept x Attach	-0.009	0.006	-0.062	-0.525	0.128				

Note. Accept = Acceptance; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

It is evident from Models 1a and 1b (Table 18) that significant results were found for both perceived parental acceptance and attachment at the 1% level. Therefore, it can be concluded that parental acceptance directly influenced physical bullying victimisation. The results for the intervening variable (attachment) suggest that the influence of attachment on preadolescent physical bullying victimisation was independent of the influences of perceived parental acceptance.

Both perceived parental acceptance and attachment were added to the regression equation in Model 2. Whereas an insignificant result was found for the correlation between perceived parental acceptance and physical bullying victimisation, the relation between attachment and physical bullying victimisation remained significant at the 1% level. Consequently, it can be concluded that attachment mediated the relationship between perceived parental acceptance and physical bullying victimisation. Attachment was not found to be a moderator, as no significant product term ($\beta = -0.062$; $p = .128$) was found in the last model. The mediating effect of attachment is depicted visually in Figure 14.

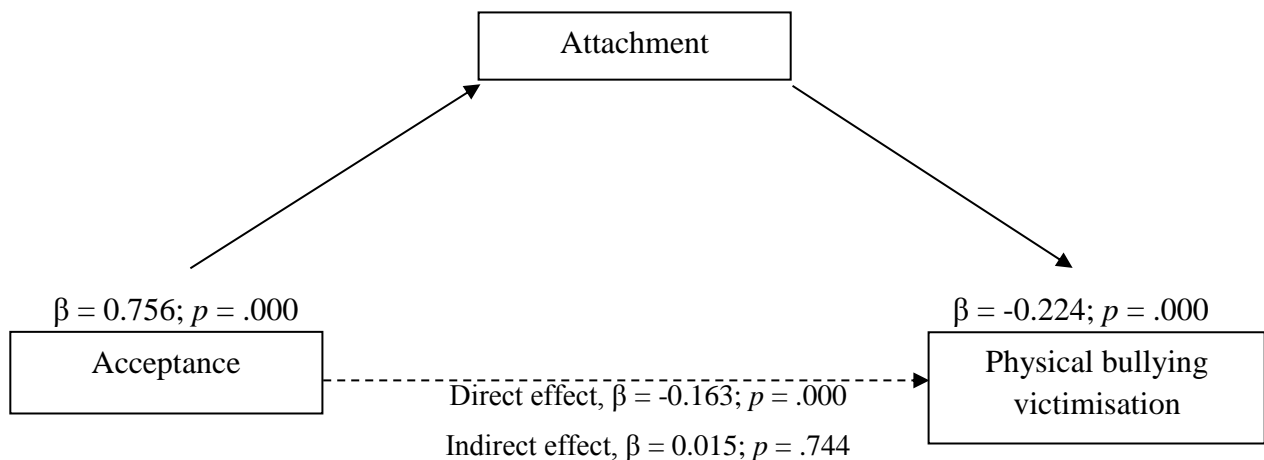


Figure 14. The mediating effect of attachment in the relationship between perceived parental acceptance and physical bullying victimisation.

It is evident from Figure 14 that there was a significant positive correlation between perceived parental acceptance and attachment ($\beta = 0.756$). In turn, attachment presented with a significant negative relationship ($\beta = -0.224$) with physical bullying victimisation, which suggests that the higher the level of preadolescent perceived parental acceptance, the more inclined they were to experience higher-quality attachment, which in turn reduced the likelihood of experiencing physical bullying as a target.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 19 presents the results of attachment as an intervening variable in the relationship between perceived parental acceptance and verbal bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 19

Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Verbal Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	18.599	1.206		15.427	0.000	35.388	0.178	0.032	0.031
Accept	-0.267	0.045	-0.178	-5.945	0.000				
1b (Constant)	17.534	0.674		26.001	0.000	85.168	0.271	0.073	0.072
Attach	-0.210	0.023	-0.271	-9.229	0.000				
2. (Constant)	16.126	1.230		13.114	0.000	43.556	0.274	0.075	0.073
Accept	0.092	0.067	0.161	5.369	0.007				
Attach	-0.246	0.035	-0.317	-7.082	0.000				
3. (Constant)	19.172	1.629		11.767	0.000	31.912	0.286	0.082	0.079
Accept	0.012	0.073	0.008	0.162	0.871				
Attach	-0.269	0.036	-0.346	-7.563	0.000				
Accept x Attach	-0.013	0.004	-0.114	-2.838	0.005				

Note. Accept = Acceptance; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

It is evident from Table 19 that the product term ($\beta = -0.114$; $p = .005$) was significant at the 1% level, indicating that attachment served as a moderator variable (Model 3) in the relationship between perceived parental acceptance and verbal bullying perpetration. The nature of this moderating effect was investigated by calculating the relationship between perceived parental acceptance and verbal bullying perpetration for learners who respectively obtained low and high scores on the moderating variable (attachment) measure. Consequently, two separate regression lines were calculated—one for learners who scored high on attachment (on or higher than the 75th percentile, $n = 317$; a score of 34 or higher) and one for learners who scored low on attachment (on or lower than the 25th percentile, $n = 277$; a score of 25 or lower). These regression lines are depicted in Figure 15.

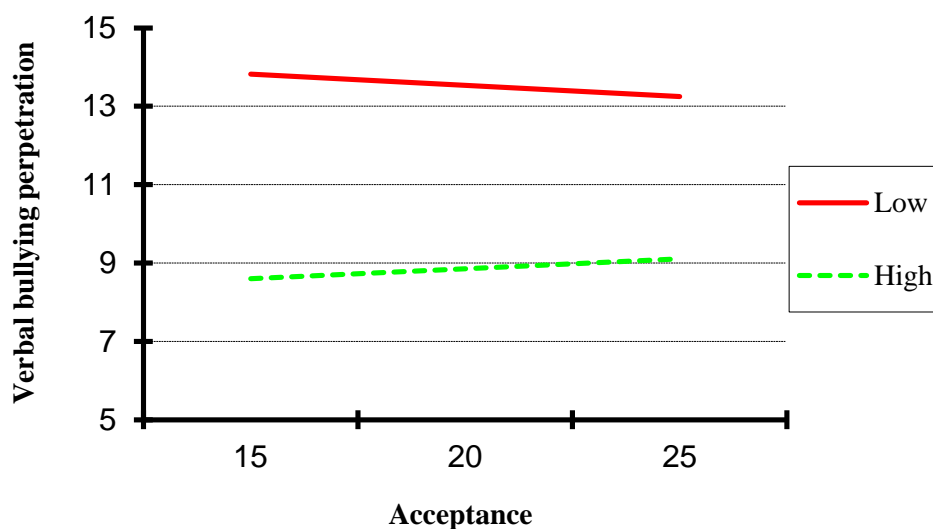


Figure 15. Regression lines of low and high attachment groups with perceived parental acceptance as predictor of verbal bullying perpetration.

It is evident from Figure 15 that there was a very slight increase (slope = 0.051) in the regression line for preadolescents with high levels of attachment (the upper 25%), while for preadolescents with low attachment (the lower 25%), there was a slight decrease (-0.057) in the slope of the regression line. These results are indicative of the fact that for both groups, as there was an increase in perceived parental acceptance, there was not much of an increase or decrease in verbal bullying perpetration. However, evident from these results was that for preadolescents with low attachment, there were consistently higher levels of verbal bullying perpetration as compared to preadolescents with high levels of attachment (even as parental acceptance levels rose).

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 20 depicts the results of attachment as an intervening variable in the relationship between perceived parental acceptance and verbal bullying victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 20

Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Verbal Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	26.377	1.709		15.433	0.000	35.426	0.179	0.032	0.031
Accept	-0.379	0.064	-0.179	-5.952	0.000				
1b (Constant)	24.515	0.959		25.563	0.000	78.037	0.260	0.068	0.067
Attach	-0.286	0.032	-0.260	-8.834	0.000				
2. (Constant)	23.153	1.749		13.234	0.000	39.447	0.261	0.068	0.067
Accept	0.089	0.095	0.042	0.931	0.352				
Attach	-0.321	0.050	-0.292	-6.490	0.000				
3. (Constant)	25.013	2.325		10.758	0.000	26.801	0.264	0.070	0.067
Accept	0.040	0.104	0.019	0.385	0.700				
Attach	-0.335	0.051	-0.304	-6.598	0.000				
Accept x Attach	-0.008	0.006	-0.049	-1.214	0.225				

Note. Accept = Acceptance; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

It is evident from Models 1a and 1b (Table 20) that significant results were found for both perceived parental acceptance and attachment at the 1% level. Therefore, it can be concluded that perceived parental acceptance influenced verbal bullying victimisation directly. The results for the intervening variable (attachment) suggest that it played an important role in preadolescent verbal bullying victimisation, as its influences were independent from that of parental acceptance.

Both perceived parental acceptance and attachment were added to the regression equation in Model 2. In this case, an insignificant result was obtained for the correlation between perceived parental acceptance and verbal bullying victimisation, whereas the relation between attachment and verbal bullying victimisation remained significant at the 1% level. Thus, it seems that attachment mediated the relationship between perceived parental acceptance and verbal bullying victimisation. Because no significant product term ($\beta = -0.049; p = .225$) was found in the last model, it could be concluded that attachment did not moderate the relationship between parental acceptance and verbal bullying victimisation. The mediating effect of attachment is depicted visually in Figure 16.

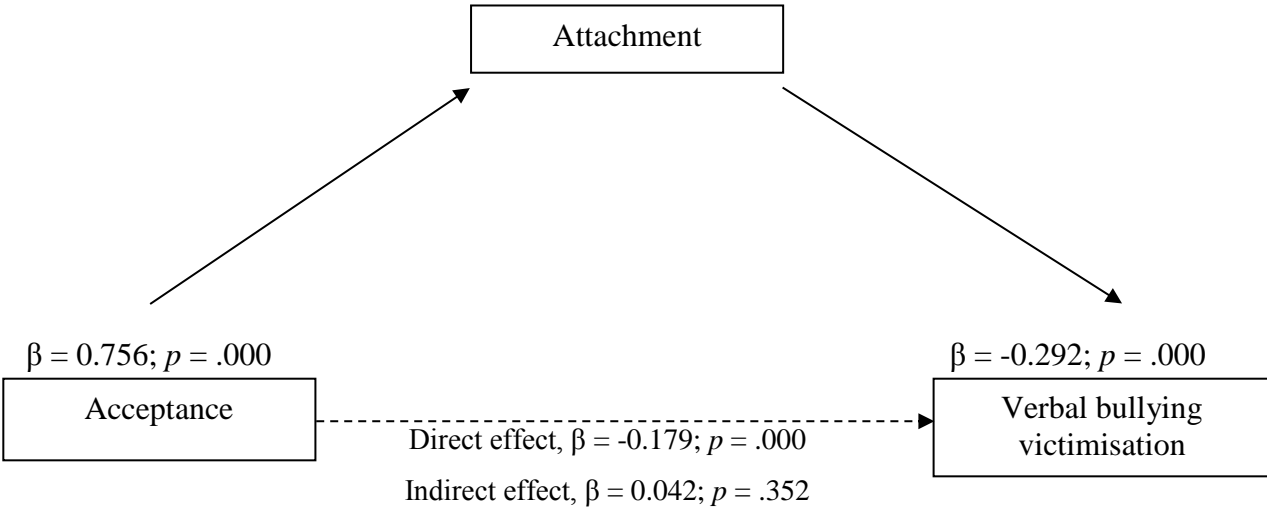


Figure 16: The mediating effect of attachment in the relationship between perceived parental acceptance and verbal bullying victimisation.

It is clear from Figure 16 that there was a significant positive correlation between perceived parental acceptance and attachment ($\beta = 0.756$). In turn, attachment presented with a significant negative relation ($\beta = -0.292$) with verbal bullying victimisation. This suggests that the higher the level of perceived parental acceptance, the more inclined preadolescents

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

were to experience high-quality attachment, which in turn reduced the likelihood of experiencing verbal bullying as a target.

Table 21 presents the results of attachment as an intervening variable in the relationship between perceived parental acceptance and social-relational bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 21

Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Social-relational Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	13.278	0.862		15.403	0.000	24.257	0.148	0.022	0.021
Accept	-0.158	0.032	-0.148	-4.925	0.000				
1b (Constant)	12.221	0.488		25.019	0.000	44.178	0.199	0.039	0.039
Attach	-0.110	0.017	-0.199	-6.647	0.000				
2. (Constant)	12.161	0.891		13.642	0.000	22.072	0.199	0.039	0.038
Accept	0.004	0.049	0.004	0.080	0.936				
Attach	-0.111	0.025	-0.201	-4.412	0.000				
3. (Constant)	13.583	1.184		11.474	0.000	26.801	0.206	0.042	0.040
Accept	-0.033	0.053	-0.031	-0.635	0.526				
Attach	-0.122	0.026	-0.221	-4.714	0.000				
Accept x Attach	-0.006	0.003	-0.075	-1.822	0.069				

Note. Accept = Acceptance; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

It is evident from Models 1a and 1b (Table 21) that significant results were obtained for both perceived parental acceptance and attachment at the 1% level. Therefore, it can be concluded that parental acceptance influenced social-relational bullying perpetration directly. The influence of the intervening variable (attachment) suggests that it played an important role in preadolescent social-relational bullying perpetration as it had a direct influence on this form of bullying that was independent of the influence of perceived parental acceptance.

Both perceived parental acceptance and attachment were added to the regression equation in Model 2. In this case, an insignificant result was found for the correlation between perceived parental acceptance and social-relational bullying perpetration, whereas the relationship between attachment and social-relational bullying perpetration remained significant at the 1% level. Thus, it seems that attachment mediated the relation between perceived parental acceptance and social-relational bullying perpetration. Because an insignificant product term ($\beta = -0.075$; $p = .069$) was found in the last model, it can be concluded that attachment did not moderate the relationship between parental acceptance and social-relational bullying perpetration. The mediating effect of attachment is depicted visually in Figure 17.

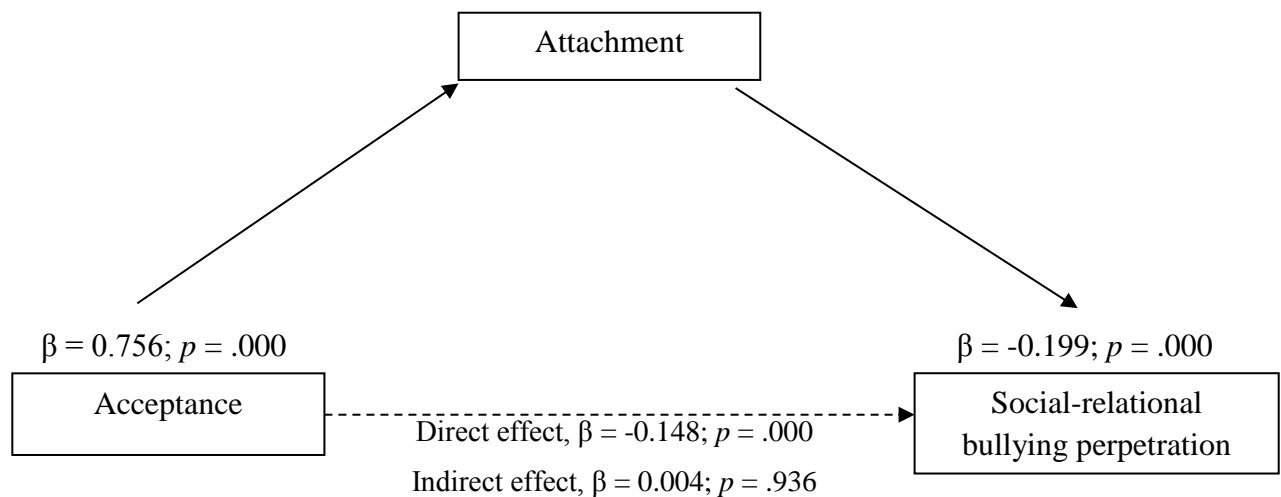


Figure 17. The mediating effect of attachment in the relationship between perceived parental acceptance and social-relational bullying perpetration.

Figure 17 depicts a significant positive correlation between perceived parental acceptance and attachment ($\beta = 0.756$), whereas attachment, in turn, presents with a significant negative relation ($\beta = -0.199$) with social-relational bullying perpetration. This suggests that the higher the level of perceived parental acceptance, the more inclined

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

preadolescents were to experience high-quality attachment, which in turn reduced the likelihood of engaging in social-relational bullying as a perpetrator.

Table 22 presents the results of attachment as an intervening variable in the relationship between perceived parental acceptance and social-relational bullying victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 22

Hierarchical Regression Analyses with Perceived Parental Acceptance as the Independent Variable, Social-relational Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	18.631	1.407		13.237	0.000	22.183	0.142	0.020	0.019
Accept	-0.247	0.052	-0.142	-4.710	0.000				
1b (Constant)	16.898	0.799		21.159	0.000	38.950	0.187	0.035	0.034
Attach	-0.169	0.027	-0.187	-6.241	0.000				
2. (Constant)	16.954	1.458		11.632	0.000	19.458	0.187	0.035	0.033
Accept	-0.004	0.079	-0.002	-0.046	0.963				
Attach	-0.167	0.041	-0.185	-4.052	0.000				
3. (Constant)	17.259	1.938		8.903	0.000	12.980	0.187	0.035	0.032
Accept	-0.012	0.086	-0.007	-0.135	0.700				
Attach	-0.169	0.042	-0.188	-3.999	0.000				
Accept x Attach	-0.001	0.005	-0.010	-0.239	0.225				

Note. Accept = Acceptance; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The results from Models 1a and 1b (Table 22) reveal that both perceived parental acceptance and attachment exhibited significant, direct relationships (at the 1% level) to social-relational bullying victimisation for this sample. The effects of the intervening variable (attachment) on social-relational bullying victimisation were also independent from that of perceived parental acceptance.

Both perceived parental acceptance and attachment were added to the regression equation in Model 2. In this case, an insignificant result was found for the correlation between perceived parental acceptance and social-relational bullying victimisation, whereas the relation between attachment and social-relational bullying victimisation remained significant at the 1% level. Thus, it seems that attachment mediated the relation between perceived parental acceptance and social-relational bullying victimisation. Because an insignificant product term ($\beta = -0.010$; $p = .225$) was found in the last model, it can be concluded that attachment does not moderate the relationship between perceived parental acceptance and social-relational bullying victimisation. The mediating effect of attachment is depicted visually in Figure 18.

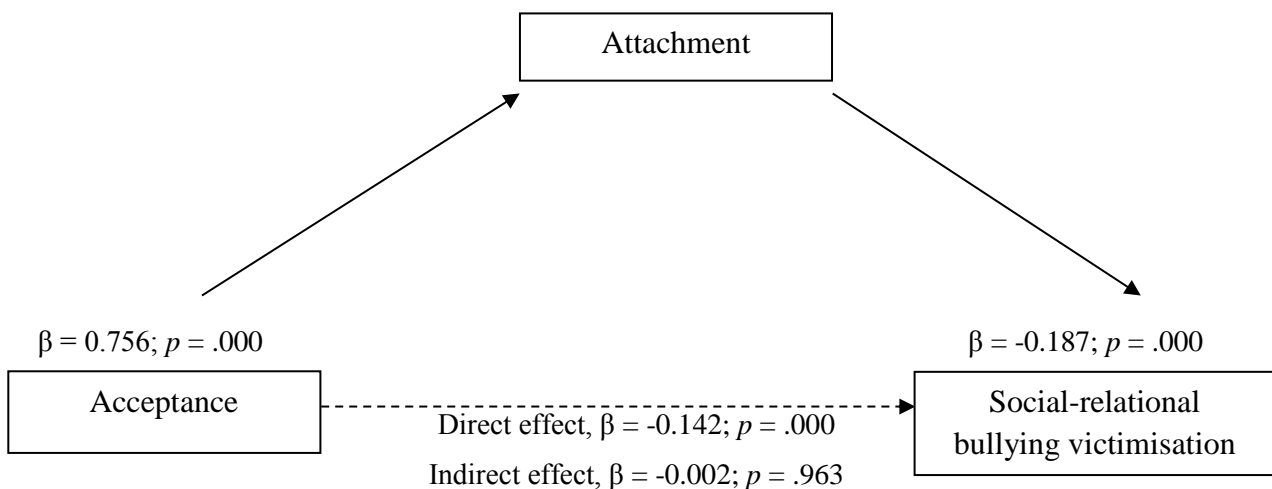


Figure 18. The mediating effect of attachment in the relationship between perceived parental acceptance and social-relational bullying victimisation.

Figure 18 clearly depicts a significant, positive correlation between perceived parental acceptance and attachment ($\beta = 0.756$). In turn, attachment presented with a significant negative relation ($\beta = -0.224$) with social-relational bullying victimisation. Therefore, the higher the level of perceived parental acceptance, the more inclined preadolescents were to experience high-quality attachment, which in turn resulted in lower levels of social-relational bullying victimisation.

8.5.2 Perceived parental firm control. The tables in this section present the results for the role of attachment in the relationship between perceived parental firm control and the various forms of bullying. First, Table 23 presents the results of attachment as an intervening variable in the relationship between perceived parental firm control and physical bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 23

Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Physical Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	7.212	0.979		7.367	0.000	8.994	0.091	0.008	0.007
Firm control	0.139	0.046	0.091	2.999	0.003				
1b (Constant)	14.197	0.564		25.188	0.000	55.806	0.222	0.049	0.048
Attach	-0.142	0.019	-0.222	-7.470	0.000				
2. (Constant)	13.476	1.326		10.162	0.000	28.067	0.223	0.050	0.048
Firm control	0.029	0.048	0.019	0.601	0.548				
Attach	-0.138	0.020	-0.216	-6.838	0.000				
3. (Constant)	13.501	1.326		10.179	0.000	19.006	0.225	0.050	0.048
Firm control	0.038	0.049	0.025	0.776	0.438				
Attach	-0.145	0.021	-0.226	-6.786	0.000				
Firm control x Attach	0.005	0.005	0.031	0.943	0.346				

Note. Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

It is evident from Models 1a and 1b (Table 23) that significant results were obtained for both perceived parental firm control as well as attachment at the 1% level. Thus, it can be concluded that perceived parental firm control had a direct influence on physical bullying perpetration. The influence of the intervening variable (attachment) suggests that it played an important role in preadolescent physical bullying perpetration, as it had a direct influence on physical bullying perpetration that is independent from the influence of perceived parental firm control.

Both perceived parental firm control and attachment were added to the regression equation in Model 2. In this case, an insignificant result was found for the correlation between perceived parental firm control and physical bullying perpetration, whereas the relationship between attachment and physical bullying perpetration remained significant at the 1% level. Thus, it seems that attachment mediated the relationship between perceived parental firm control and physical bullying perpetration. Because an insignificant product term ($\beta = 0.031$; $p = .346$) was found in the last model, it can be concluded that attachment did not moderate the relationship between perceived parental firm control and physical bullying perpetration. The mediating effect of attachment on the relationship between perceived parental firm control and physical bullying perpetration is depicted in Figure 19.

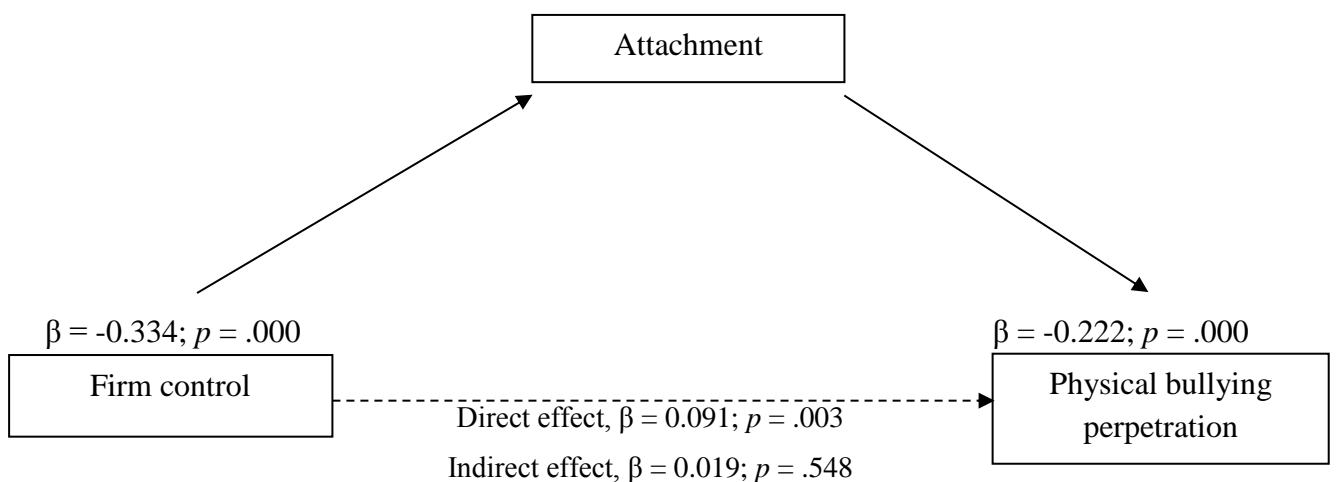


Figure 19. The mediating effect of attachment in the relationship between perceived parental firm control and physical bullying perpetration.

It is evident from Figure 19 that a significant negative correlation existed between perceived parental firm control and attachment ($\beta = -0.334$), whereas attachment, in turn, presented with a significant negative relation ($\beta = -0.222$) with physical bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

This suggests that the higher the level of perceived parental firm control, the less inclined preadolescents were to experience high-quality attachment, which in turn increased the likelihood of engaging in physical bullying as a perpetrator.

Table 24 presents the results of attachment as an intervening variable in the relationship between perceived parental firm control and physical bullying victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 24

Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Physical Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	7.627	1.452		5.252	0.000	20.613	0.137	0.019	0.018
Firm control	0.313	0.069	0.137	4.540	0.000				
1b (Constant)	20.284	0.840		24.142	0.000	56.760	0.224	0.050	0.049
Attach	-0.214	0.028	-0.224	-7.534	0.000				
2. (Constant)	16.305	1.972		8.267	0.000	30.067	0.233	0.054	0.053
Firm control	0.160	0.072	0.070	2.228	0.026				
Attach	-0.192	-0.200	-0.200	-6.369	0.000				
3. (Constant)	16.255	1.972		8.242	0.000	21.197	0.236	0.056	0.053
Firm control	0.141	0.073	0.062	1.932	0.054				
Attach	-0.179	0.032	-0.187	-5.644	0.000				
Firm control x Attach	-0.010	0.008	-0.042	-1.273	0.203				

Note. Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Model 1a (Table 24) indicates that perceived parental firm control had a direct, positive correlation with physical bullying victimisation at the 1% level. Thus, as preadolescents perceived higher levels of parental firm control, the likelihood of experiencing physical bullying as a target also increased. The results from Model 2 as well as Model 3 prove that attachment functioned as neither a mediator nor a moderator in the relationship between perceived parental firm control and physical bullying victimisation.

Table 25 presents the results of attachment as an intervening variable in the relationship between parental firm control and verbal bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 25

Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Verbal Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	6.465	1.181		5.474	0.000	18.588	0.130	0.017	0.016
Firm control	0.242	0.056	0.130	4.311	0.000				
1b (Constant)	17.534	0.674		26.001	0.000	85.168	0.271	0.073	0.072
Attach	-0.210	0.023	-0.271	-9.229	0.000				
2. (Constant)	15.468	1.585		9.757	0.000	43.662	0.274	0.075	0.073
Firm control	0.083	0.058	0.045	1.440	0.150				
Attach	-0.199	0.024	-0.256	-8.221	0.000				
3. (Constant)	15.480	1.586		9.759	0.000	29.134	0.274	0.075	0.073
Firm control	0.088	0.059	0.047	1.486	0.137				
Attach	-0.202	0.025	-0.260	-7.919	0.000				
Firm control x Attach	0.002	0.006	0.012	0.383	0.702				

Note. Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The results from Models 1a and 1b (Table 25) reveal that both perceived parental firm control as well as attachment exhibited significant direct relationships (at the 1% level) to verbal bullying perpetration for this sample. The importance of the intervening variable (attachment) for this sample was illustrated by the fact that its influence on verbal bullying perpetration was independent from that of parental firm control.

Both perceived parental firm control and attachment were added to the regression equation in Model 2. In this case, the relationship between perceived parental firm control and verbal bullying perpetration became insignificant, whereas the relationship between attachment and verbal bullying perpetration remained significant at the 1% level. Thus, it seems that attachment mediated the relationship between perceived parental firm control and verbal bullying perpetration. An insignificant product term ($\beta = 0.012$; $p = .702$) was found in the last model; therefore, it can be concluded that attachment did not moderate the relationship between perceived parental firm control and verbal bullying perpetration. The mediating effect of attachment is depicted visually in Figure 20.

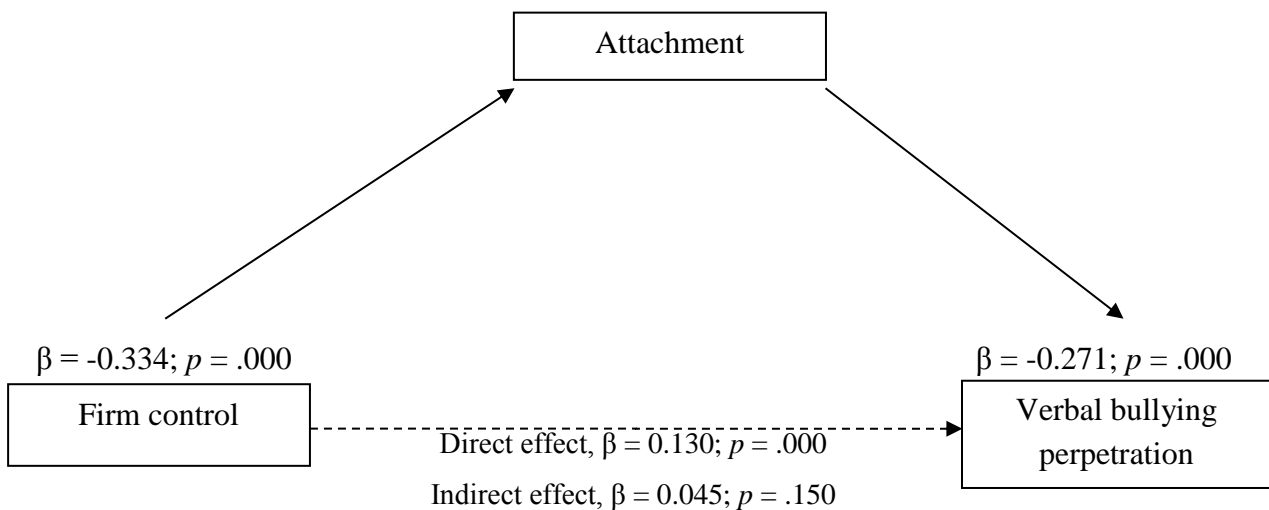


Figure 20. The mediating effect of attachment in the relationship between perceived parental firm control and verbal bullying perpetration.

It is clear from Figure 20 that there was a significant, negative correlation between perceived parental firm control and attachment ($\beta = -0.334$). In turn, attachment presented with a significant, negative relation ($\beta = -0.271$) with verbal bullying perpetration. This suggests that the higher the level of perceived parental firm control, the less inclined preadolescents were to experience high-quality attachment, which in turn increased the likelihood of verbal bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 26 presents the results of attachment as an intervening variable in the relationship between perceived parental firm control and verbal bullying victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 26

Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Verbal Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	6.844	1.664		4.114	0.000	33.050	0.173	0.030	0.029
Firm control	0.454	0.079	0.173	5.749	0.000				
1b (Constant)	24.515	0.959		25.563	0.000	78.037	0.260	0.068	0.067
Attach	-0.286	0.032	-0.260	-8.834	0.000				
2. (Constant)	18.207	2.247		8.105	0.000	44.142	0.275	0.076	0.074
Firm control	0.254	0.082	0.096	3.102	0.002				
Attach	-0.251	0.034	-0.228	-7.322	0.000				
3. (Constant)	18.168	2.247		8.085	0.000	29.664	0.277	0.077	0.074
Firm control	0.239	0.083	0.091	2.870	0.004				
Attach	-0.241	0.036	-0.219	-6.678	0.000				
Firm control x Attach	-0.007	0.009	-0.028	-0.854	0.393				

Note. Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

From Model 1a (Table 26), it is clear that there was a direct correlation between perceived parental firm control and verbal bullying victimisation at the 1% level. In other words, as preadolescents perceived higher levels of parental firm control, the likelihood of experiencing verbal bullying as a target also increased. The results from Model 2 and Model 3 proved that attachment functioned as neither a mediator nor a moderator in the relationship between perceived parental firm control and verbal bullying victimisation.

Table 27 presents the results of attachment as an intervening variable in the relationship between perceived parental firm control and social-relational bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 27

Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Social-relational Bullying Perpetration as the Dependent Variable and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	t	p	F	R	R ²	Adjusted R ²
	B	Std. Error	β						
1a (Constant)	8.301	0.847		9.797	0.000	0.853	0.028	0.001	0.000
Firm control	0.037	0.040	0.028	0.924	0.356				
1b (Constant)	12.221	0.488		25.019	0.000	44.178	0.199	0.039	0.039
Attach	-0.110	0.017	-0.199	-6.647	0.000				
2. (Constant)	13.633	1.148		11.871	0.000	23.029	0.203	0.041	0.039
Firm control	-0.057	0.042	-0.043	-1.358	0.175				
Attach	-0.118	0.018	-0.213	-6.721	0.000				
3. (Constant)	13.638	1.149		11.868	0.000	15.358	0.203	0.041	0.038
Firm control	-0.055	0.043	-0.041	-1.282	0.200				
Attach	-0.119	0.018	-0.216	-6.451	0.000				
Firm control x Attach	0.001	0.004	0.008	0.241	0.809				

Note. Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

It is evident from Model 1a (Table 27) that no significant direct relationship existed between perceived parental firm control and social-relational bullying perpetration, neither at the 1% nor at the 5% level. Therefore, it was not possible to test for any mediating effects. The results from Model 3 also proved that attachment did not function as a moderator in the relationship between perceived parental firm control and social-relational bullying perpetration.

Table 28 presents the results of attachment as an intervening variable in the relationship between perceived parental firm control and social-relational bullying victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 28

Hierarchical Regression Analyses with Perceived Parental Firm Control as the Independent Variable, Social-relational Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	5.628	1.368		4.114	0.000	22.635	0.144	0.021	0.020
Firm control	0.309	0.065	0.144	4.758	0.000				
1b (Constant)	16.898	0.799		21.159	0.000	38.950	0.187	0.035	0.034
Attach	-0.169	0.027	-0.187	-6.241	0.000				
2. (Constant)	12.015	1.872		6.418	0.000	23.760	0.206	0.042	0.041
Firm control	0.196	0.068	0.091	2.882	0.004				
Attach	-0.141	0.029	-0.156	-4.939	0.000				
3. (Constant)	11.971	1.872		6.394	0.000	16.299	0.209	0.044	0.041
Firm control	0.180	0.069	0.084	2.593	0.010				
Attach	-0.130	0.030	-0.144	-4.319	0.000				
Firm control x Attach	-0.008	0.007	-0.039	-1.167	0.243				

Note. Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The results from Model 1a (Table 28) reveal that perceived parental firm control directly correlated with social-relational bullying victimisation at the 1% level. Thus, as preadolescents perceived higher levels of parental firm control, the likelihood of experiencing social-relational bullying as a target also increased. The results from Model 2 and Model 3 proved that attachment functioned as neither a mediator nor a moderator in the relationship between perceived parental control and verbal bullying victimisation.

8.5.3 Perceived parental psychological control. The tables in this section present the results for the role of attachment in the relationship between perceived parental psychological control and the various forms of bullying.

Table 29 presents the results of attachment as an intervening variable in the relationship between perceived parental psychological control and physical bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 29

Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Physical Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	5.281	0.610		8.662	0.000	66.372	0.241	0.058	0.057
Psych control	0.064	0.028	0.070	2.312	0.021				
1b (Constant)	14.197	0.564		25.188	0.000	55.806	0.222	0.049	0.048
Attach	-0.142	0.019	-0.222	-7.470	0.000				
2. (Constant)	9.220	1.047		8.804	0.000	44.409	0.276	0.076	0.075
Psych control	0.203	0.036	0.180	5.607	0.000				
Attach	-0.095	0.021	-0.148	-4.604	0.000				
3. (Constant)	9.547	1.073		8.898	0.000	30.277	0.279	0.078	0.075
Psych control	0.206	0.036	0.183	5.693	0.000				
Attach	-0.106	0.022	-0.165	-4.797	0.000				
Psych control x Attach	0.006	0.004	0.045	1.391	0.165				

Note. Psych control = Psychological control; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

From Model 1a (Table 29), it is clear that there was a direct correlation between perceived parental psychological control and physical bullying perpetration at the 5% level. Therefore, as preadolescents perceived higher levels of parental psychological control, the likelihood of engaging in physical bullying as a perpetrator also increased. The results from Model 2 and Model 3 proved that attachment functioned as neither a mediator nor a moderator in the relationship between perceived parental psychological control and physical bullying perpetration.

Table 30 presents the results of attachment as an intervening variable in the relationship between perceived parental psychological control and physical bullying victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 30

Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Physical Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	5.235	0.894		5.854	0.000	104.84	0.298	0.089	0.088
Psych control	0.500	0.049	0.298	10.239	0.000				
1b (Constant)	20.284	0.840		24.142	0.000	56.760	0.224	0.050	0.049
Attach	-0.214	0.028	-0.224	-7.534	0.000				
2. (Constant)	10.079	1.541		6.542	0.000	60.501	0.318	0.101	0.099
Psych control	0.415	0.053	0.248	7.815	0.000				
Attach	-0.117	0.030	-0.122	-3.849	0.000				
3. (Constant)	10.341	1.579		6.548	0.000	40.509	0.319	0.102	0.099
Psych control	0.418	0.053	0.250	7.847	0.000				
Attach	-0.126	0.033	-0.131	-3.860	0.000				
Psych control x Attach	0.004	0.006	0.024	0.758	0.449				

Note. Psych control = Psychological control; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

From Model 1a (Table 30), it is clear that there was a direct correlation between perceived parental psychological control and physical bullying victimisation at the 1% level. In other words, as preadolescents perceived higher levels of parental psychological control, the likelihood of experiencing physical bullying victimisation also increased. The results from Model 2 and Model 3 proved that attachment functioned as neither a mediator nor a moderator in the relationship between perceived parental psychological control and physical bullying victimisation.

Table 31 presents the results of attachment as an intervening variable in the relationship between perceived parental psychological control and verbal bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 31

Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Verbal Bullying Perpetration as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	4.076	0.725		5.624	0.000	110.74	0.305	0.093	0.092
Psych control	0.416	0.040	0.305	10.523	0.000				
1b (Constant)	17.534	0.674		26.001	0.000	85.168	0.271	0.073	0.072
Attach	-0.210	0.023	-0.271	-9.229	0.000				
2. (Constant)	9.716	1.240		7.837	0.000	72.42	0.345	0.119	0.117
Psych control	0.318	0.043	0.234	7.441	0.000				
Attach	-0.136	0.024	-0.175	-5.569	0.000				
3. (Constant)	9.979	1.271		7.854	0.000	5.614	0.346	0.119	0.117
Psych control	0.321	0.043	0.236	7.489	0.000				
Attach	-0.145	0.026	-0.186	-5.532	0.000				
Psych control x Attach	0.004	0.005	0.030	0.946	0.344				

Note. Psych control = Psychological control; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

From Model 1a (Table 31), it is clear that there was a direct correlation between perceived parental psychological control and verbal bullying perpetration at the 1% level. Thus, as preadolescents perceived higher levels of parental psychological control, the likelihood of engaging in verbal bullying perpetration also increased. The results from Model 2 and Model 3 proved that attachment functioned as neither a mediator nor a moderator in the relationship between perceived parental psychological control and verbal bullying perpetration.

Table 32 presents the results of attachment as an intervening variable in the relationship between perceived parental psychological control and verbal bullying victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 32

Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Verbal Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	6.022	1.030		5.846	0.000	105.13	0.298	0.089	0.088
Psych control	0.576	0.056	0.298	10.253	0.000				
1b (Constant)	24.515	0.959		25.563	0.000	78.037	0.260	0.068	0.067
Attach	-0.286	0.032	-0.260	-8.834	0.000				
2. (Constant)	13.585	1.764		7.699	0.000	67.625	0.334	0.112	0.110
Psych control	0.445	0.061	0.230	7.308	0.000				
Attach	-0.182	0.035	-0.165	-5.247	0.000				
3. (Constant)	13.743	1.029		7.597	0.000	45.101	0.334	0.112	0.109
Psych control	0.447	0.061	0.231	7.316	0.000				
Attach	-0.188	0.037	-0.170	-5.032	0.000				
Psych control x Attach	0.003	0.007	0.013	0.399	0.690				

Note. Psych control = Psychological control; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

From Model 1a (Table 32), it is clear that there was a direct correlation between perceived parental psychological control and verbal bullying victimisation at the 1% level. Therefore, it can be said that as preadolescents perceived higher levels of parental psychological control, the likelihood of experiencing verbal bullying as a target also increased. The results from Model 2 and Model 3 prove that attachment functioned as neither a mediator nor a moderator in the relationship between perceived parental psychological control and verbal bullying victimisation.

Table 33 presents the results of attachment as an intervening variable in the relationship between perceived parental psychological control and social-relational bullying perpetration.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 33

Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Social-relational Bullying Perpetration as the Dependent Variable and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	5.288	0.528		10.007	0.000	54.161	0.219	0.048	0.047
Psych control	0.212	0.029	0.219	7.359	0.000				
1b (Constant)	12.221	0.488		25.019	0.000	44.178	0.199	0.039	0.039
Attach	-0.110	0.017	-0.199	-6.647	0.000				
2. (Constant)	8.288	0.910		9.109	0.000	35.609	0.249	0.062	0.060
Psych control	0.160	0.031	0.165	5.100	0.000				
Attach	-0.072	0.018	-0.131	-4.036	0.000				
3. (Constant)	8.633	0.932		9.266	0.000	24.733	0.254	0.065	0.062
Psych control	0.164	0.031	0.169	5.211	0.000				
Attach	-0.084	0.019	-0.152	-4.378	0.000				
Psych control x Attach	0.006	0.003	0.055	1.691	0.091				

Note. Psych control = Psychological control; Attach = Attachment.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

From Model 1a (Table 33), it is clear that a direct correlation existed between perceived parental psychological control and social-relational bullying perpetration at the 1% level. In other words, as preadolescents perceived higher levels of parental psychological control, the likelihood of engaging in social-relational bullying as a perpetrator also increased. The results from Model 2 and Model 3 proved that attachment functioned as neither a mediator nor a moderator in the relationship between perceived parental psychological control and social-relational bullying perpetration.

Table 34 presents the results of attachment as an intervening variable in the relationship between perceived parental psychological control and social-relational bullying victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 34

Hierarchical Regression Analyses with Perceived Parental Psychological Control as the Independent Variable, Social-relational Bullying Victimization as the Dependent Variable, and Attachment as the Intervening Variable

Model	Unstandardised coefficient		Standardised coefficient	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>B</i>	Std. Error	β						
1a (Constant)	5.381	0.858		6.270	0.000	64.041	0.237	0.056	0.055
Psych control	0.375	0.047	0.237	8.003	0.000				
1b (Constant)	16.898	0.799		21.159	0.000	38.950	0.187	0.035	0.034
Attach	-0.169	0.027	-0.187	-6.241	0.000				
2. (Constant)	9.413	1.481		6.355	0.000	37.874	0.257	0.066	0.064
Psych control	0.305	0.051	0.193	5.962	0.000				
Attach	-0.097	0.029	-0.108	-3.332	0.001				
3. (Constant)	9.069	1.518		5.974	0.000	25.609	0.258	0.067	0.064
Psych control	0.301	0.051	0.190	5.875	0.000				
Attach	-0.085	0.031	-0.095	-2.728	0.006				
Psych control x Attach	-0.006	0.006	-0.034	-1.036	0.300				

Note. Psych control = Psychological control; Attach = Attachment.

From Model 1a (Table 34), it is clear that there was a direct correlation between perceived parental psychological control and social-relational bullying victimisation at the 1% level. In other words, as preadolescents perceived higher levels of parental psychological control, the likelihood of experiencing social-relational victimisation also increased. The results from Model 2 and Model 3 proved that attachment functioned as neither a mediator nor a moderator in the relationship between perceived parental psychological control and social-relational bullying victimisation.

The results for Research Hypothesis 3 are presented in the next section. Firstly, the discussion focuses on the three assumptions that need to be satisfied, followed by the MANOVA results with gender and ethnicity as the main effects, as well as the results for the interaction between gender and ethnicity. Thereafter, the results for the one-way ANOVAs for each of the dependent variables (i.e., physical bullying perpetration and victimisation, verbal bullying perpetration and victimisation, as well as social-relational bullying perpetration and victimisation) are presented.

8.6 Research Hypothesis 3

As discussed previously, it was necessary to determine whether the data set fulfilled three assumptions (Du Toit & Stumpf, 1982) before the third research hypothesis could be tested. These assumptions included that

- the data set has to originate from a multivariate normal population;
- with equal subgroup covariance matrices; and
- the subgroups are a collection of various independent data sets (Du Toit & Stumpf, 1982).

With regard to the first assumption, there was a great degree of certainty that the data set originated from a multivariate normal population. The smallest number of observations for the categories of the remaining independent variables is approximately 441. Therefore, it can be stated that the means of the subpopulations will be distributed approximately normally, according to the central limit theorem (Field, 2013; Howell, 2013). It is also evident from Table 8 that the data for cyberbullying perpetration and victimisation were not distributed normally, and therefore were not used in further analyses.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

With regard to the second assumption, to test for equal subgroup covariance matrices for gender and ethnicity, it was necessary to use a part of the DISCRIM procedure—Bartlett’s test statistic. If this procedure yielded a significant χ^2 -value, it would indicate unequal subgroup covariance matrices. The results appear in Table 35.

Table 35

Test for Equality of Covariance Matrices

Independent variable	χ^2 -value	<i>Y</i>	<i>p</i>
Gender	11.087	6	0.0857
Ethnicity	8.088	6	0.1732

It is evident from Table 35 that neither of the χ^2 -values was significant at the 1% level. Thus, it can be concluded that the dependent measure covariance matrices did not differ significantly across the groups, and that there were equal subgroup covariance matrices for the main effects. With regard to the third assumption, it seems from the research design that the subgroups were independent.

As all assumptions had been met, hypothesis testing could proceed. To this end, a MANOVA was conducted with gender and ethnicity as the two main effects. Additionally, the interaction between gender and ethnicity was also tested. These results are presented in Table 36.

Table 36

MANOVA Results with Gender and Ethnicity as Main Effects and the Different Forms of Bullying Perpetration and Victimisation as the Dependent Variables

Effect	df	<i>F</i>	<i>p</i>	<i>f</i>
Gender	6; 1069	15.922	0.000	0.29
Ethnicity	6; 1069	41.676	0.000	0.44
Interaction	6; 1069	1.897	0.078	-

The results from Table 36 indicate that significant main effects were found for both gender and ethnicity at the 1% level. No significant interaction effects were found ($p = 0.078$). As there were six dependent variables (physical bullying perpetration and victimisation, verbal bullying perpetration and victimisation, as well as social-relational bullying

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

perpetration and victimisation), one-way ANOVAs were conducted to determine for which of these dependent variables significant differences between the means existed. Table 37 shows the results for the two gender groups.

Table 37

ANOVA Results with Gender as Main Effect

Dependent variable	Boys		Girls		v	Mean square	F	p	f
	\bar{X}	SD	\bar{X}	SD					
Physical (perp)	11.00	5.18	9.51	4.22	1	547.38	26.969**	0.000	0.15
Physical (victim)	14.63	7.10	13.82	6.91	1	120.91	2.638	0.105	
Verbal (perp)	12.28	6.08	10.97	5.34	1	425.22	15.617**	0.000	0.12
Verbal (victim)	16.12	8.08	16.43	8.05	1	28.63	0.471	0.493	
Social-relational (perp)	8.96	3.95	9.15	4.11	1	14.28	0.902	0.342	
Social-relational (victim)	11.28	6.28	12.62	6.60	1	453.72	10.532**	0.001	0.10

Note. SD = Standard Deviation; perp = perpetration; victim = victimisation.

* $p \leq .05$. ** $p \leq .01$.

The results from Table 37 prove that there were statistically significant differences at the 1% level between the means of the two genders for three dependent variables; namely physical bullying perpetration, verbal bullying perpetration, and social-relational bullying victimisation. Owing to their small corresponding effect sizes (*f*), however, these differences were of little practical importance; therefore, the results were not interpreted further. Table 38 presents the ANOVA results for the two ethnic groups

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Table 38

ANOVA Results with Ethnicity as Main Effect

Dependent variable	White Afrikaans		Black Southern Sotho		v	Mean square	F	p	f
	\bar{X}	SD	\bar{X}	SD					
Physical (perp)	9.15	3.88	11.39	4.33	1	1247.97	61.486**	0.000	0.23
Physical (victim)	12.66	6.38	16.12	6.29	1	2797.78	61.041**	0.000	0.23
Verbal (perp)	9.60	3.93	14.01	3.60	1	4926.06	180.91**	0.000	0.38
Verbal (victim)	14.50	7.51	18.69	8.15	1	4449.57	73.16**	0.000	0.26
Social-relational (perp)	8.43	3.19	9.92	3.83	1	529.15	33.42**	0.000	0.17
Social-relational (victim)	11.74	6.54	12.50	6.65	1	151.482	3.52	0.061	

Note. SD = Standard Deviation; perp = perpetration; victim = victimisation

* $p \leq .05$. ** $p \leq .01$.

It is clear from Table 38 that statistically significant differences in the means of the two ethnic groups were found for all dependent variables, with the exception of social-relational bullying victimisation. Medium effect sizes were found for physical bullying perpetration and victimisation and for verbal bullying victimisation. In addition, a large effect size was obtained for verbal bullying perpetration. Subsequently, these results were subjected to further interpretation. In all four cases, the black Southern Sotho-speaking participants obtained a significantly larger mean score compared to the white Afrikaans-speaking participants. Thus, it could be concluded that black Southern Sotho-speaking preadolescents were involved in physical bullying (perpetration and victimisation) and verbal bullying (perpetration and victimisation) to a greater degree than white Afrikaans-speaking preadolescents were. A small effect size (f) was obtained for social-relational bullying perpetration; therefore, it will not be discussed any further.

8.7 Chapter Summary

This study set out to determine whether there were significant relationships between various perceived parenting dimensions (acceptance, firm control, and psychological control) and different forms of bullying perpetration and victimisation (physical, verbal, social-relational, and cyber) among preadolescents. If such relationships were found to exist, the potential effects of gender and ethnicity on these relationships were examined prior to testing for the second research hypothesis, namely the potential intervening effect (mediating and moderating) of parent-child attachment on the relationships between perceived parenting dimensions and various forms of bullying perpetration and victimisation. Finally, it was examined whether any statistically significant differences in the means of bullying perpetration and victimisation between the respective gender and ethnic groups existed.

The results demonstrated that all variables exhibited acceptable levels of skewness and kurtosis, with the exception of cyberbullying perpetration and victimisation. Consequently, these variables did not form part of subsequent analyses. With regard to the first research hypothesis, statistically significant correlations (at the 1% level) were found between perceived parental acceptance and all three forms of bullying perpetration and victimisation (physical, verbal, and social-relational), as well as between perceived parental psychological control and all three forms of bullying perpetration and victimisation. Similar results were found between perceived parental firm control and bullying perpetration and victimisation, with the exceptions that firm control did not significantly correlate with social-relational bullying perpetration, and a significant relationship between firm control and physical bullying perpetration was found only at the 5% level. Additionally, it was found that perceived parental psychological control accounted for the largest percentage of the variance in all three forms of bullying perpetration and victimisation. Even though the latter findings on perceived parental psychological control were significant at the 1% level, the corresponding effect sizes indicated that these results were not of practical importance. With regard to attachment, this variable significantly correlated (at the 1% level) with all three types of perceived parenting dimensions, as well as with all forms of bullying perpetration and victimisation.

Prior to testing the intervening effect of attachment on the relationship between perceived parenting dimensions and bullying perpetration and victimisation, the potential effects of gender and ethnicity on the relationships between perceived parenting dimensions

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

and bullying were investigated. Although there were statistically significant increases (at the 1% level) in the R^2 values with the addition of gender and ethnicity respectively, the corresponding effect sizes (f^2) ranged from small to very small. Therefore, it was concluded that gender and ethnicity did not exert important influences, and all subsequent analyses were conducted for the sample as a whole.

In testing the second research hypothesis, it was found that attachment mediated the relations between perceived parental acceptance and all forms of bullying perpetration and victimisation, with the exception of verbal bullying perpetration, in which attachment functioned as a moderator. With regard to the mediating effects, it can be concluded that the higher the level of perceived parental acceptance was, the more inclined preadolescents were to experience high-quality parent-child attachment, which in turn reduced the likelihood of participating in the various forms of bullying either as a perpetrator or as a target. In the model where attachment served as a moderator, the results indicated that for both attachment groups (high and low) as the level of perceived parental acceptance increased, there was not much of an increase or decrease in verbal bullying perpetration. However, the results also showed that preadolescents with low attachment consistently engaged in higher levels of verbal bullying perpetration as compared to preadolescents with high levels of attachment. In the case of perceived parental firm control, attachment mediated only the relations between perceived parental firm control and physical and verbal bullying perpetration respectively. In both cases, it could be concluded that the higher the level of perceived parental firm control was, the less inclined preadolescents were to experience high-quality attachment relationships with their parents, which in turn increased the likelihood of engaging in physical and verbal bullying as a perpetrator. Attachment did not function as a moderator in any of the correlations. For perceived parental psychological control, attachment functioned as neither a mediator nor a moderator in any of the relations between psychological control and bullying.

With regard to the third research hypothesis, results proved that although significant main effects were found for both gender and ethnicity (at the 1% level), there were no significant interaction effects between these biographical variables. The results for gender indicated that boys obtained higher mean scores for both physical and verbal bullying perpetration, whereas girls experienced more social-relational bullying victimisation. However, these mean differences were of little practical importance due to their small effect sizes. Finally, it was found that black Southern Sotho-speaking preadolescents were significantly more involved in physical and verbal bullying perpetration and victimisation as

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

compared to white Afrikaans-speaking preadolescents. The results presented in this chapter, including their associations with theory and practice, are discussed further in the next chapter.

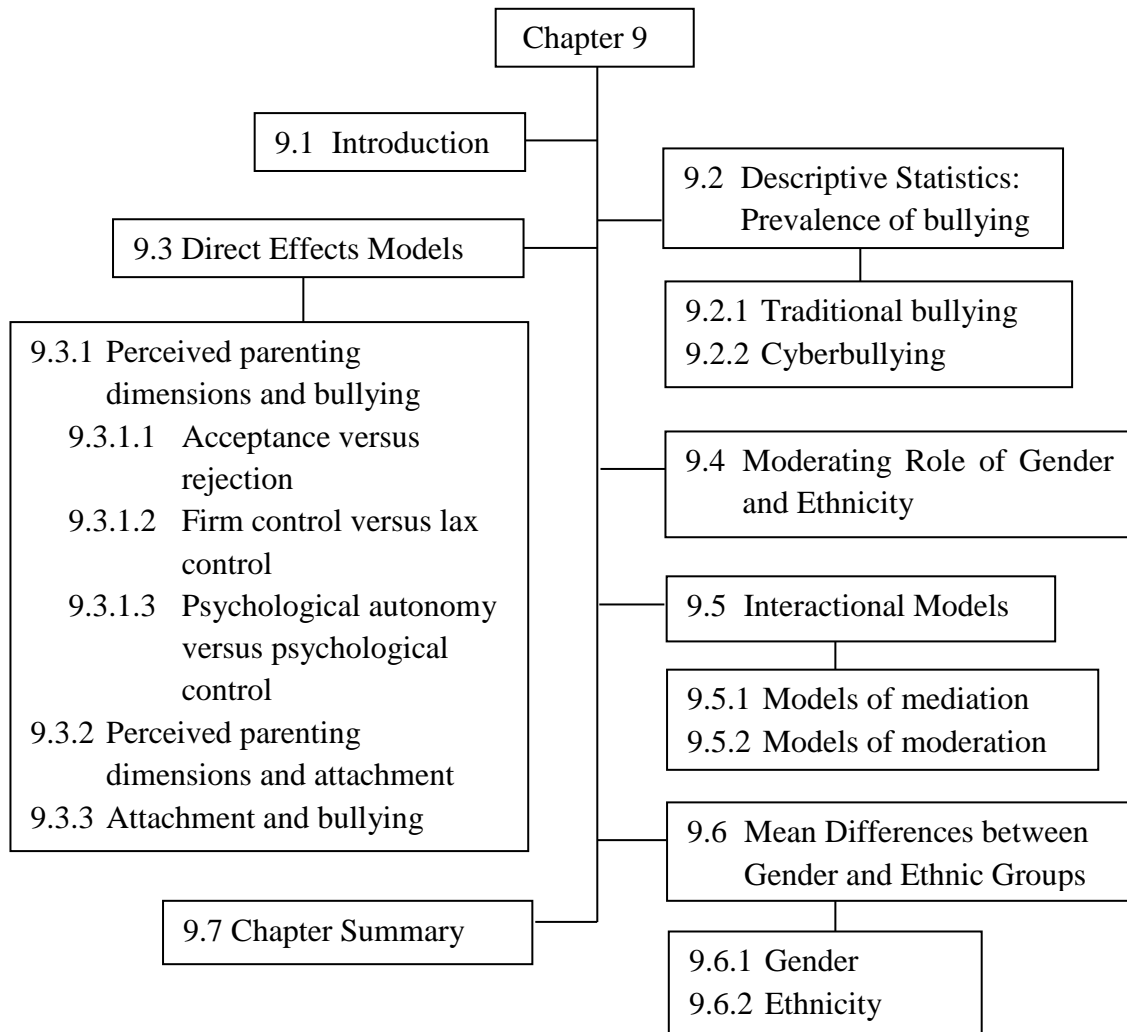
Chapter 9: Discussion

Figure 21. Outline of Chapter 9.

9.1 Introduction

The current study aimed to investigate the role of parent-child attachment in the relationships between perceived parenting dimensions and different types of bullying perpetration and victimisation among preadolescents. Therefore, the study set out to determine whether significant relationships exist between perceived parenting dimensions (i.e., acceptance, firm control, and psychological control) and different forms of bullying perpetration and victimisation (i.e., physical, verbal, social-relational, and in cyberspace). In other words, the study set out to examine whether perceived parenting dimensions could account for a significant percentage of the variance in each of the different forms of bullying

perpetration and victimisation. Next, the study investigated whether these relationships would vary according to gender and ethnic group. The second objective aimed to determine the role of parent-child attachment—whether it functions as a mediator or a moderator in the correlations between perceived parenting dimensions and bullying. Finally, the third objective of the study was to investigate whether there were any significant differences in the means of bullying perpetration and victimisation between the different gender and ethnic groups.

First, the frequency at which acts of traditional bullying and cyberbullying occur is discussed, to illustrate the great need for research on bullying in South Africa. Next, the discussion will focus on the direct effects of perceived parenting dimensions and attachment on bullying. Findings for the potential moderating role of gender and ethnicity will be outlined, followed by discussions on the models of mediation and moderation. Finally, the mean differences in bullying between gender and ethnic groups will be discussed. A visual outline of this chapter is presented in Figure 21.

9.2 Descriptive Statistics: Prevalence of bullying

9.2.1 Traditional bullying. International research and limited South African research indicate that bullying perpetration and victimisation is a prevalent phenomenon in primary schools (Greeff & Grobler, 2008; Luxenberg et al., 2015; Nesor et al., 2004; Walsh & Cosma, 2016). As research in the field of developmental psychopathology examines causal mechanisms, developmental trajectories, and risk factors, less attention is given to the prevalence of child and adolescent psychological disorders (Lavigne, LeBailly, Hopkins, Gouze, & Binns, 2009). Accordingly, the present investigation did not attempt to examine prevalence rates for bullying perpetration and victimisation among preadolescents. However, the fact that almost half of the sample (46.29%) provided their names for assistance with bullying-related problems provides a rough indication of the need for anti-bullying interventions. Such a high figure is perturbing because bullying can result in a variety of individual internalising and externalising symptoms or disorders, family- and peer-related problems, as well as complications at a contextual level (see Chapter 3, Section 3.7). It should also be noted that with each type of bullying, the mean scores for bullying victimisation are greater than the corresponding bullying perpetration rates, similar to the findings of the many studies discussed in Chapter 3 (Section 3.5.1). Furthermore, statistically significant differences were found among the various types of bullying: For both bullying perpetration and victimisation, verbal bullying was found to occur most frequently, followed by physical

and then social-relational bullying. The fact that the mean scores for verbal bullying were higher than other forms of traditional bullying is also consistent with international literature (Luxenberg et al., 2015; Thomas et al., 2016) and other South African-based studies (Coertze & Bezuidenhout, 2013). Therefore, in this group of preadolescents, direct forms of bullying occurred at a significantly higher rate than indirect forms of bullying did. It is often believed that the form of bullying changes with increasing age: As physical bullying declines, social-relational bullying becomes more prevalent (Williford et al., 2011). Similar to the results of some other studies (e.g., Farrell et al., 2014), findings from the current study suggest that such a trend might be observed only in older samples of adolescents.

9.2.2 Cyberbullying. The current study found very high skewness values for both cyberbullying perpetration and victimisation, indicating that the data were positively skewed. In other words, cyberbullying occurred at very low rates for the sample of preadolescents, despite the fact that the majority of the participants reported to have access to a cell phone (91.56%) and the Internet (76.62%). This finding is consistent with those of many other international and South African studies in which cyberbullying was found to be more prevalent in older adolescents, but still occurred at a lower rate compared to traditional bullying (Bauman, 2010; Luxenberg et al., 2015; Tustin et al., 2014; Walsh & Cosma, 2016). Most of the popular social media platforms, including Facebook (2017), WhatsApp (2017), Instagram (2017), and Google (2017) (which permits setting up an e-mail account), have a minimum age limit of 13 years. Seeing that cyberbullying (both internationally and in South Africa) takes place mostly on social networks (especially Facebook) compared to cell phones, chatrooms, and e-mails (Carter & Wilson, 2015; Scholtz, Van Turha, & Johnston, 2015), it is likely that this sample of preadolescents were still too young to regularly participate in online activities, including cyberbullying. Alternatively, preadolescents may not have yet developed sophisticated phone and Internet skills to allow them to participate in frequent acts of cyberbullying (Connell et al., 2013).

It is also possible that even though the majority of participants had access to cell phones and the Internet, only few had the financial means to utilise social media platforms, seeing that the Free State (as many other South African provinces) has high poverty rates (Statistics South Africa, 2014). As the study did not measure participants' level of socioeconomic status, such a hypothesis should be regarded as tentative until confirmed by future research.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Another possibility could be that at this age, parents still exercise relatively high levels of firm control or monitoring over their preadolescents' online behaviour. As parents lower the levels of monitoring with increasing adolescent age, the frequency of cyberbullying may increase (Kowalski et al., 2014; Shapka & Law, 2013). Thus, it is expected that the prevalence of cyberbullying perpetration and victimisation might increase with age as adolescents gain access to multiple electronic platforms and develop technological skills that are more advanced.

On the contrary, the low frequency rates for cyberbullying perpetration and victimisation may be the result of participants' reluctance to disclose their cyberbullying experiences to the researcher. It is frequently reported that adolescents do not tell adults about incidents of cyberbullying for fear of losing technology privileges (Bauman, 2010). However, the fact that assurance was provided regarding the anonymity and confidentiality of the responses and that children and adolescents consider the task of answering self-reports seriously and truthfully (Olweus, 2010), the possibility of dishonest responses regarding cyberbullying experiences is thus considered to be low. Additionally, this was the first time (to the author's knowledge) that this particular set of cyberbullying items was administered to a sample of preadolescents in the Free State. However, acceptable levels of internal consistency were obtained for the cyberbullying subscales (0.777 for cyberbullying perpetration and 0.785 for cyberbullying victimisation), indicating that reasons for the cyberbullying results obtained can rather be attributed to the developmental period, lack of technological access or skills, financial constraints, or even higher levels of parental monitoring as opposed to limitations in the subscales themselves.

9.3 Direct Effects Models

9.3.1 Perceived parenting dimensions and bullying

9.3.1.1 Acceptance versus rejection. For the first research hypothesis, correlational and regression analyses were used to determine the relationships between perceived parenting dimensions and the different types of bullying perpetration and victimisation. It was firstly revealed that perceived parental acceptance correlated significantly with all forms of bullying perpetration and victimisation in the expected direction: As parental acceptance increases, preadolescent bullying involvement decreases. This finding is consistent with the vast majority of previous studies (e.g., Atik & Güneri, 2013; Bayraktar, 2012; Bibou-Nakou et al.,

2013). Thus, when preadolescents perceive their parents as affectionate, supportive, and positively involved in their lives, they are less inclined to bully others or experience bullying as a victim. In contrast, when parental behaviour is perceived to communicate rejection, disapproval, or neglect, bullying is likely to increase. According to social learning theory, preadolescents observe and imitate the parental behaviour they experience at home (Bandura, 1973). That is, if they observe accepting and responsive behaviours at home, they come to value relationships as a source of comfort (Walden & Beran, 2010). Subsequently, they will imitate these behaviours by being friendly to peers at school; thereby becoming more socially accepted and less likely to engage in, or experience bullying acts (Georgiou, 2008). Rohner's (2004) parental acceptance-rejection theory (PART) postulates that everyone has a fundamental need for positive responses from significant people in their lives (Rohner & Khaleque, 2010). If this need is not satisfied, rejected individuals will act in certain ways in an attempt to secure such positive responses. For example, rejected preadolescents constantly may seek approval, reassurance, or engage in other dependency-related behaviour. In turn, such behaviour may be perceived by their peers as undesirable or irritating, resulting in higher instances of bullying victimisation. Alternatively, the pain experienced by being rejected by their parents may result in feelings of anger and hostility (Rohner & Khaleque, 2010). Thus, in an attempt to alleviate some of these painful emotions, preadolescents may engage in aggressive and passive-aggressive behaviour; in this case, bullying perpetration.

Apart from these direct effects, parental acceptance also indirectly influenced all forms of bullying perpetration and victimisation (with the exception of verbal bullying perpetration) by affecting the quality of the parent-child attachment relationship. Further elaboration regarding these indirect effects is provided in Section 9.5.1.

9.3.1.2 Firm control versus lax control. Statistically significant direct relationships between firm control and all forms of bullying perpetration and victimisation (with the exception of social-relational bullying perpetration) were found. Therefore, when parents implement and enforce many restrictions and strict discipline or do not allow their preadolescents any independence, the risk for engaging in or experiencing bullying is increased; a finding that is in line with some previous studies (e.g., Stavrinides et al., 2015). Perceived parental firm control did not correlate with social-relational bullying perpetration. That is, a preadolescent's involvement in this form of bullying does not vary according to the level of firm control employed by the parent. As firm control involves controlling preadolescents' behaviour by direct means (Schaefer, 1965b; Schludermann & Schludermann,

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

1970), preadolescents may reproduce such behaviour at school by attempting to control their peers through direct methods that take the form of acts of physical and verbal bullying perpetration.

In addition, when parental firm control is exerted at high levels, preadolescents may not differentiate it from psychological control (Anderson & Branstetter, 2012). In other words, preadolescents will perceive firm control behaviour as resembling parental psychological controlling behaviour. Thus, instead of protecting preadolescents from harmful situations and peers, preadolescents striving for autonomy may perceive high levels of parental firm control as intrusive and as attempts to control their lives. Consequently, parental firm control produces opposite, harmful effects (i.e., bullying perpetration)—similar to that of psychological control. Besides these direct effects, parental firm control also influenced physical- and verbal bullying perpetration indirectly by way of attachment. These models of mediation are discussed further in Section 9.5.1.

In contrast, firm control influenced involvement in all three types of bullying victimisation experiences only in a direct manner (i.e., no indirect effects involving attachment were observed). If preadolescents are continuously exposed to very strict and harsh parenting, they might learn that they are not allowed to express their needs, thereby believing that they are powerless (Lereya et al., 2013). If such submissive behaviour and beliefs are generalised to the peer context, they might be perceived as easy targets by perpetrators.

9.3.1.3 *Psychological autonomy versus psychological control.* Using social learning theory as an explanation, it would imply that the third parenting dimension—an indirect means of parental control—will affect only indirect forms of bullying. However, the present investigation demonstrated that perceived parental psychological control directly correlated with both direct and indirect forms of bullying perpetration. As established by previous researchers (e.g., Bayraktar, 2012; Li et al., 2015), when parents utilise psychological controlling techniques to gain control over their preadolescents' development, the risk for engaging in bullying as a perpetrator and/or victim increases. As preadolescence is marked by increasing attempts to gain autonomy and develop as an individual apart from the parent, the use of control techniques that intrude upon a preadolescent's independent thinking and feeling may be particularly harmful in terms of development. Thus, psychological controlling parenting may increase the risk of bullying; regardless of type. Although social learning

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

theory can be used to understand the correlation between psychological control and social-relational bullying perpetration (i.e., preadolescents imitate the manipulative and covert aggressive strategies they observe in their parents in the form of social-relational bullying tactics), the processes that lead to direct bullying are less clear. These results nevertheless illustrate the developmental psychopathology principle of multifinality: Although preadolescents may experience similar psychological controlling parenting, some will employ direct bullying tactics, whereas others prefer to utilise indirect bullying techniques. Most likely, this parenting dimension interacts with other individual and social variables to determine the type of bullying the preadolescent ultimately prefers.

For victimisation, psychological controlling parents may force their preadolescent to conform to their demands, irrespective of the preadolescent's own needs and desires (Soenens & Vansteenkiste, 2010). This need to please others may generalise to the peer context, in which preadolescents may develop submissive interactional styles and in turn contribute to the risk for victimisation (Li et al., 2015). Furthermore, when parents engage in highly controlling behaviour, it might be perceived by preadolescents as overprotection. Consequently, these overprotected preadolescents struggle to part from their parents and experience problems with autonomy and identity formation (Hilton et al., 2010). These preadolescents may view themselves as inadequate to handle difficult situations such as bullying, resulting in difficulties defending themselves in bullying situations and/or engage in behaviour that invites bullying (Bibou-Nakou et al., 2013; Kokkinos, 2013).

The significant effect of this parenting dimension on preadolescent development can be demonstrated by the fact that psychological control accounted for most of the variance observed in bullying that could be attributed to parenting dimensions. In other words, psychological control can be regarded as the most important parental influence on preadolescent bullying, similar to the findings of other studies illustrating that the effects of psychological control are more detrimental to development compared to that of behavioural control (Li et al., 2015). Such negative consequences are even more evident in samples of older children and adolescents compared to younger children (Doyle & Markiewicz, 2005; Eichelsheim et al., 2010). Studying preadolescent bullying involvement resulting from parental psychological control emphasises the salience of preadolescent needs for autonomy and individuation, demonstrating the mutually informative principle of developmental psychopathology.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Although each of the three parenting dimensions accounted for a unique proportion of the variance (6.3% to 10.2%) in the different types of bullying perpetration and victimisation, the corresponding effect sizes were found to range from small to very small (i.e., the influence of parenting dimensions on bullying is of little practical importance). In other words, although parenting dimensions can be acknowledged as risk factors for bullying, these cannot explain the entire phenomenon. Likewise, Breinholst et al. (2015) found that negative parenting behaviour and insecure parent-child attachment explained only 18.4% of the variance of preadolescent anxiety. Such findings support the developmental psychopathology principle stating that individual risk factors, or even two factors studied simultaneously seldom result in problem behaviour or psychopathology (Cicchetti, 2006), which once again illustrates the complex nature of the phenomenon of bullying.

9.3.2 Perceived parenting dimensions and attachment. Analyses regarding the associations between parenting dimensions and attachment revealed similar results to those found in previous studies: Perceived parental acceptance continues to influence the parent-child attachment relationship positively, just as it promotes secure attachment during infancy (Bosmans & Kerns, 2015; Gallarin & Alonso-Arbiol, 2012; Mothander & Wang, 2014). According to a study conducted by Beijersbergen et al. (2012), there is no continuity of attachment from early childhood to adolescence, except when sensitive parental support is taken into account. The results from their longitudinal study suggest that the continuity of attachment from early childhood through to adolescence is dependent on the continuity of the child-rearing context, especially in less stable family environments. Thus, regardless of child age, parental sensitive support remains an important factor in determining the security of attachment bonds. Likewise, the finding from the current research study asserts that the quality of current parent-child attachment during preadolescence is associated with current parenting behaviour that communicates parental involvement, support, responsiveness, and acceptance.

In the case of firm control and psychological control, inverse relationships were found between these parenting dimensions and attachment. Such findings are in line with other international studies (e.g., Cai et al., 2013; Scott et al., 2013), in which high levels of parental control were found to interfere with preadolescents' perceptions of their parents as sources of comfort and restrict preadolescents' opportunities to explore the environment and develop as autonomous individuals. Consequently, the quality of the parent-child attachment bond declines. This finding suggests that for the parent-child attachment bond to remain secure,

preadolescents should be allowed to explore their environment and express their own thoughts and feelings (Bosmans & Kerns, 2015). Overall, if parents are responsive to their preadolescents' needs for acceptance and permit independent exploration of the environment, secure parent-child attachment bonds will be formed and maintained (Bretherton, 1992).

9.3.3 Attachment and bullying. Consistent with the small body of research investigating attachment and bullying (e.g., Klomek et al., 2016; Williams & Kennedy, 2012), the results of the current investigation found statistically significant negative relationships between parent-child attachment and all forms of bullying. In other words, preadolescents who experience attachment relationships that are more secure with their primary caregivers are less likely to become involved in bullying as a perpetrator and/or victim. These associations can be explained in the contexts of the formation of a secure base and safe haven (Ainsworth & Bowlby, 1991; Hazan & Shaver, 1994), the influence of internal working models (Bowlby, 1969), the processing of social information (Crick & Dodge, 1994), securing the attention of attachment figures (Rohner & Khaleque, 2010), and attempting to establish social dominance (Moretti et al., 2004)—all of which are elaborated on further in Section 9.5.1.

9.4 Moderating Role of Gender and Ethnicity

Prior to testing whether attachment functions as a mediator or a moderator (Research Hypothesis 2), it was necessary to determine whether the relationships between parenting dimensions and bullying varied according to gender and ethnicity. If so, all subsequent analyses would be conducted for each gender and ethnic group separately. By testing for moderation effects, the current study was able to determine if and how gender and ethnicity influenced the development of preadolescent bullying, instead of controlling for these variables and removing their effects.

Although there was a statistically significant increase (on the 1% level) in R^2 with the addition of gender to the regression model, the corresponding effect sizes ranged from small to very small. Therefore, preadolescent gender did not exert an important influence on parenting-bullying correlations—a finding that corresponds with some other international studies (e.g., Wang et al., 2009; Windle et al., 2010). According to the differential susceptibility perspective, parent and preadolescent characteristics interact to determine the risk for problem behaviour involvement (Barnett & Scaramella, 2013). However, the results

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

of the present study indicate that neither boys nor girls were more sensitive to the effects of a certain parenting dimension. Whereas some researchers (e.g., Fagan et al., 2011) believe that parenting behaviour will have a stronger effect on problem behaviour for girls (as girls are taught to value interpersonal relationships), the findings of the current study indicate that parenting dimensions can equally affect both boys' and girls' involvement in bullying. In other words, lower parental acceptance, as well as higher firm control and psychological control, similarly increases the risk for bullying involvement for both gender groups. These findings are consistent with the presumption that acceptance is a universal need to which all individuals will respond similarly (Rohner & Khaleque, 2010). Likewise, as individuation and achieving autonomy are developmental needs common to preadolescent boys and girls, parental control dimensions would have the same effects in both genders (Batanova & Loukas, 2014).

The results for the role of ethnicity are similar: There are no important ethnic differences regarding the effects of parenting dimensions on preadolescent bullying. Stated differently, the level at which a parenting dimension results in maladaptive outcomes in black Southern Sotho-speaking preadolescents is the same as for white Afrikaans-speaking preadolescents. Therefore, the current study appears to support an ethnic equivalence model regarding bullying in preadolescents. In contrast to studies that suggest that the use of parental control strategies in collectivistic cultures do not result in negative preadolescent outcomes (Chao & Aque, 2009; Nunes et al., 2013), the findings of the present investigation demonstrate that high levels of parental firm control and psychological control lead black Southern Sotho-speaking preadolescents to bully or become targets of bullying at a higher rate. These findings are in line with findings of previous research that established that perceived parental acceptance, firm control, and psychological control had similar effects on bullying across ethnic groups (Hokoda et al., 2006; Li et al., 2015; Windle et al., 2010). Such results suggest that preadolescent needs for approval, structure, and autonomy are universal and that parenting dimensions that undermine these needs lead to bullying.

Moreover, these results could suggest that the Southern Sotho culture, which is regarded as more collectivistic by past researchers, is actually more individualistic than previously thought. In fact, various South African researches (e.g., Mpofu, 1994; Van Dyk & De Kock, 2004; Vogt & Laher, 2009) found no significant differences between white and black cultures in terms of the constructs of individualism and collectivism. If this is the case, no conclusions can be made yet on whether parenting dimensions function similarly in individualistic

cultures as they do in collectivistic cultures. As the current study did not measure the degree of individualistic versus collectivistic orientation, the only firm conclusion that can be drawn presently is that parenting dimensions function similarly (with regard to bullying) in the white Afrikaans culture and in the black Southern Sotho culture. As no gender or ethnic effects were observed, all subsequent analyses of mediation and moderation (with attachment as the intervening variable) were conducted for the sample as a whole.

9.5 Interactional Models

After investigating how parenting dimensions and attachment were related directly to bullying, attention is given to how these variables interacted to produce the outcome behaviour (Research Hypothesis 2). Whereas models of mediation are based on the premise that attachment explains the associations between perceived parenting dimensions and bullying, moderation models state that attachment would change the strength or direction of the relationships between these two constructs.

9.5.1 Models of mediation. Attachment mediated all the relationships between parental acceptance and bullying perpetration and victimisation (with the exception of verbal bullying perpetration). That is, parental acceptance was related positively to attachment, which in turn correlated negatively with bullying—a finding that is consistent with the results of some other studies investigating the mediating effect of attachment between parental acceptance and child or adolescent developmental outcomes (e.g., Breinholst et al., 2015; Doyle & Markiewicz, 2005). Similarly, the results of the current study found that the relationships between parental firm control and physical and verbal bullying perpetration were also mediated by parent-child attachment. Such results are in accordance with those of previous studies that found that attachment mediated correlations between harsh punishment and conduct disorder symptoms (e.g., Scott et al., 2013). More specifically, firm control correlated negatively with attachment, which in turn had a negative relationship with bullying perpetration. Attachment did not mediate any of the associations between parental psychological control and bullying, suggesting that this parenting dimension perhaps exerts its effects on bullying via mechanisms other than altering the parent-child attachment bond. For both parental acceptance and firm control, the observed relations can be explained by referring to one or more explanations involving the use of parents as a secure base and safe haven, the quality of the internal working models, social information processing, securing

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

parental attention, and establishing social dominance. Each of these is outlined in the discussions that follow.

Parenting perceived to be responsive and accepting improved the quality of the parent-child attachment bond. This implies that when preadolescents perceive their parents as supportive and involved, they are more willing to trust and communicate their needs and concerns with their parents. In this way, they are able to use their parents as a secure base and safe haven from whom they can part to explore the environment and to whom they can return during times of distress. For example, when parents are perceived as a safe haven, preadolescents would feel more comfortable in reporting bullying incidents to them, which allows parents to intervene and assist in decreasing incidents of victimisation (Hemphill et al., 2015), or at least buffer against the detrimental socioemotional consequences of bullying victimisation (Bowes et al., 2010; Claes et al., 2015). However, when insecure preadolescents are experiencing some form of distress, their attention field narrows to the object of their worries, namely the availability of their parents (Bosmans et al., 2015). Therefore, if insecure preadolescents are being bullied, instead of seeking support from their parents (i.e., attachment-related behaviour), their attention is restricted to concerns about whether their parents would be available and assist them in their time of distress. This narrow attention field could reflect the individual's simultaneous needs to approach, but also avoid the parent (Bosmans et al., 2015). In turn, this decision process delays the preadolescent's attempts to seek parental support—allowing victimisation to prolong and its consequences to worsen.

At a representational level, insecure preadolescents possess negative internal working models that guide them in future interactions with others. In fact, Doyle and Markiewicz (2005) found that lower levels of parental warmth influenced adolescents' view of themselves and their view of their parents negatively. Thus, preadolescents who experience rejecting parenting might expect that they are not worthy of love and consequently develop negative views of themselves or a low self-esteem—risk factors for both bullying perpetration and victimisation (Álvarez-García et al., 2015; Cassidy, 2009; Zych et al., 2015). For example, perpetrators with negative views of themselves might dominate others in an attempt to achieve a higher social ranking and compensate for their low self-esteem. On the other hand, the negative self-views of insecure preadolescents could interfere with their ability to effectively manage stressful situations (Rohner, Khaleque, & Cournoyer). Thus, victims of bullying possess beliefs that they are unable to cope with or assert themselves in bullying situations, and may even become emotionally upset (e.g. tearful) when having to confront

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

such situations. Perpetrators of bullying are thus given the impression that they are easy targets. In this way, experiences of victimisation may endure or even increase in frequency.

In addition to affecting internal working models of self, rejecting and/or controlling parenting can influence one's view of the primary caregiver, which may be generalised to other contexts or people. In this way, preadolescents may come to expect others to act in similar ways as the unsupportive or strict parent, which in turn may influence how they interpret and respond to social cues (i.e., social information processing). For example, insecure preadolescents would be more likely to view their peers' intents as aggressive, construct aggressive responses, and hold favourable attitudes toward aggressive responses (Dykas & Cassidy, 2011; Granot & Mayseless, 2012). Additionally, insecure preadolescents may also experience cognitive distortions such as blaming others and minimising the consequences of their negative behaviour (De Vries, Hoeve, Stams, & Asscher, 2016). As they do not experience frequent reciprocal communication with their parents, insecure preadolescents may struggle to process the thoughts and emotions of others (i.e., poor theory of mind) (Dykas & Cassidy, 2007; You et al., 2015). Consequently, these cognitive and social-cognitive deficits lead to bullying perpetration and victimisation (Bayraktar, 2012; Shakoor et al., 2012; Williford et al., 2016; Ziv et al., 2013). Thus, it appears that preadolescents seek out or create environments that are consistent with their internal working models, adhering to the agency principle of developmental psychopathology (Fraley, 2002; Masten, 2006).

According to PART theory (Rohner & Khaleque, 2010), if preadolescents are accustomed to inconsistent or unresponsive caregiving, they could engage in intense efforts to secure the attention of their parent in an attempt to satisfy their fundamental need to experience some form of an emotional bond with another individual (Michiels et al., 2008). These expectations and behaviour may also be transferred to potential attachment figures (e.g., friends or a romantic partner) outside of the family context (Moretti et al., 2004), resulting in the use of intense efforts (e.g., aggression or manipulation that constitute bullying perpetration) just to gain acceptance from or establish friendships with peers. However, in the peer context, such strategies prove to be maladaptive. Alternatively, preadolescents who feel rejected may demand excessive attention from their peers by constantly seeking approval or reassurance (Rohner et al., 2012) that could instead elicit peer rejection or cause insecure preadolescents to engage in submissive behaviour, making them easy targets for perpetrators.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

PART theory (Rohner & Khaleque, 2010) also postulates that preadolescents who perceive rejection from significant others feel angry and resentful—emotions experienced as intensely painful. Subsequently, these preadolescents engage in behaviours that would function as self-protective responses so that emotional contact within the insecure parent-child relationship (resulting from rejecting or overly strict parenting) may be minimised; with such behaviours generalising to the peer context (Michiels et al., 2008; Rohner & Khaleque, 2010). In this way, preadolescents attempt to protect themselves from further rejection (Rohner et al., 2012). Therefore, insecure preadolescents may engage in bullying perpetration in an attempt to cope with their expectations of rejection from their peers (Soenens et al., 2008).

Instead of attention seeking and attempts to secure relationships with others, it may be that insecure preadolescents are uninterested in forming attachment relationships with others, feeling confident in their own capabilities to manage (Moretti et al., 2004). As achieving social status is a significant developmental goal in preadolescence, bullying perpetration in these individuals might be unrelated to a need to establish emotional bonds, but perhaps rather aid the preadolescent in achieving dominance. Therefore, such preadolescents would bully others (both friends and strangers alike) to satisfy their own needs, seeing that they feel little empathy towards the needs of others (Moretti et al., 2004).

9.5.2 Models of moderation. In the present investigation, only one moderation model was confirmed. Although attachment mediated the relationships between perceived parental acceptance and most types of bullying, it functioned as a moderator in the relationship between perceived parental acceptance and verbal bullying perpetration.

For both high and low attachment groups, there was only a very slight increase and decrease in the regression slopes respectively. These findings indicate that, because there is an increase in perceived parental acceptance, there is not much of an increase or decrease in verbal bullying perpetration. However, it is evident from the results that for preadolescents with low attachment, there are consistently higher levels of verbal bullying perpetration as compared to preadolescents with high levels of attachment (even as parental acceptance levels rise). Reflecting the results of studies in general literature on aggression (e.g., Cyr et al., 2014; Murray et al., 2014), this finding affirms that parent-child attachment protects preadolescents from getting involved in verbal bullying as perpetrators. If it is assumed that the current quality of attachment largely reflects the bond established in early childhood (Fraley et al., 2011), it implies that attachment may provide the context that determines the effect of

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

parenting on preadolescent behaviour. In other words, even if parents are perceived to engage in more accepting behaviour during preadolescence, the negative consequences of a poor parent-child bond still persists, resulting in higher rates of involvement in verbal bullying perpetration. A similar conclusion was reached in a study conducted by Keller, Spieker, and Gilchrist (2005), who found that, relative to securely attached children, preschool children who were classified as insecurely attached during infancy were at an increased risk of developing a problem behaviour trajectory, even when exposed to positive parenting behaviour.

Currently, it is unclear why attachment would moderate the correlation between parental acceptance and verbal bullying perpetration, but function as a mediator for all other types of bullying perpetration and victimisation. In other words, the association between parental acceptance and verbal bullying perpetration is not accounted for by changes in the quality of the parent-child attachment bond, as observed with other types of bullying. This implies that parental acceptance and attachment are two independent factors that interact to influence verbal bullying perpetration. Therefore, although these preadolescents perceived their parents as engaging in accepting behaviour frequently, they still regarded the attachment relationship they had with their parents as poor, with the result that they verbally bullied others increasingly. Perhaps preadolescents who engage in verbal bullying are a different group of individuals compared to those involved in other forms of bullying perpetration. For example, Farrell et al. (2014) illustrate how different forms of bullying perpetration are associated with different personality characteristics, suggesting that different preadolescents will be more inclined to employ one form of bullying rather than another. Thus, it appears that for the group of preadolescents who mainly employ verbal bullying tactics, the constructs of parenting and attachment relate to each other in a different way compared to other forms of bullying. In other words, there are other mechanisms that would explain better how parenting exerts its effects on verbal bullying perpetration, just as alternative factors other than parental acceptance (e.g., changing life circumstances) would influence the quality of attachment instead. However, several studies maintain that the various forms of bullying overlap (e.g., one individual is likely to utilise both physical and verbal bullying tactics). To understand this finding better, it perhaps would be fruitful to first identify groups of individuals who participate in different, overlapping forms of bullying and then determine whether the interaction between perceived parental acceptance and attachment is applicable to preadolescents who engage only in verbal bullying (thus marking this group as distinct), or

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

whether the finding can also be observed in preadolescents who engage in other (multiple) forms of bullying perpetration. Table 39 provides a visual summary of the intervening role of attachment (mediator versus moderator) in the relationships between parenting dimensions and different forms of bullying.

Table 39
Summary of the Intervening Role of Attachment

Type of bullying	Parenting dimension		
	Acceptance	Firm control	Psychological control
Physical perpetration	Mediator	Mediator	-
Physical victimisation	Mediator	-	-
Verbal perpetration	Moderator	Mediator	-
Verbal victimisation	Mediator	-	-
Social-relational perpetration	Mediator	-	-
Social-relational victimisation	Mediator	-	-

9.6 Mean Differences between Gender and Ethnic Groups

Research Hypothesis 3 postulates that there will be statistically significant differences in the means of bullying perpetration and victimisation between respective gender and ethnic groups. In addition to investigating the main effects of gender and ethnicity, this study also aimed to determine whether these two demographic factors would interact to explain differences in bullying perpetration and victimisation levels—an objective only a few researchers have examined in the past (e.g., Vervoort et al., 2010; Wang, Iannotti et al., 2012). Without examining the interaction between two independent variables, any conclusions regarding their independent contributions to the dependent variable (i.e., main effects) may be misleading. In fact, De Muth (2014) suggests that one needs to verify the existence of any interaction effects first, and only if none is found, separate investigations can be conducted for the main effects.

As inconsistencies exist in the literature regarding the role of ethnicity in bullying perpetration and victimisation, interaction effects have been suggested as a possible explanation accounting for these discrepancies. It has also been suggested that, since sex roles may vary across different ethnic groups, gender in one group may affect bullying differently than in another ethnic group (Vervoort et al., 2010). However, according to the results of the

current study, there was no interaction between gender and ethnicity in relation to bullying. The lack of such interaction effects is consistent with some other studies (e.g., Smith, Thompson, et al., 2012) and suggests that any gender and ethnic differences (or lack thereof) observed in this study apply to the groups as a whole, rather than to certain ethnic or gender groups. For example, the differences in some forms of bullying perpetration and victimisation between black Southern Sotho-speaking and white Afrikaans-speaking participants apply to both boys and girls; rather than to only one specific gender group.

9.6.1 Gender. After establishing that no interaction effects existed, valid assumptions can now be made regarding any main effects that may be observed (De Muth, 2014). Studying whether gender differences exist in types of bullying could provide more information regarding the developmental and socialisation needs of preadolescents, as stated by the mutually informative principle of developmental psychopathology. In terms of bullying perpetration, the current investigation demonstrated that there were statistically significant differences between the means of the gender groups, in that boys were involved in physical and verbal bullying perpetration more frequently. However, the corresponding effect sizes were small in magnitude, suggesting that these gender differences were negligible.

The conclusion of minor gender differences in direct forms of bullying is inconsistent with many studies finding that boys were often more involved in overt types of bullying perpetration (e.g., Arslan et al., 2012; Connell et al., 2013; Lucia, 2016). However, it has also been suggested that boys and girls may engage in preferred forms of bullying increasingly after puberty as biological differences become more evident, intrasexual competition for dominance becomes more eminent, and peer pressure heightens regarding the use of gender normative aggressive methods (Card, Stucky, Sawalani, & Little, 2008). In fact, Griesel et al. (2012) found that although junior high school boys were involved in physical and verbal bullying perpetration more often compared to girls, by the senior grades, these scores had diverged even further (i.e., older boys reported even more involvement in physical and verbal bullying than girls did). Thus, it is possible that in this sample of preadolescents, preferred types of bullying perpetration have not yet been established among the gender groups to an extent that would warrant separate prevention or intervention programmes for boys and girls.

Additionally, the findings of the current study suggested that boys were as likely as girls were to utilise social-relational techniques to bully others. Consistent with the findings of some other researchers (e.g., Card et al., 2008; Connell et al., 2013; Vieno et al., 2011), this

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

result contradicts the common belief that, compared to boys, girls are more involved in social-relational bullying perpetration. It is likely that, as peer relationships become increasingly important for both genders in the preadolescent and adolescent years, boys become as likely as girls to exert their power through damaging relationships (Yeung & Leadbeater, 2007).

Similar bullying perpetration involvement by both genders may also be explained by Olthof and Goossens (2007), who found that involvement in bullying perpetration was related to a preadolescent's desire to be accepted by antisocial boys (in the case of boys), or boys in general (in the case of girls). Thus, equal involvement in bullying perpetration may result from preadolescent boys and girls viewing bullying as a means to establish either dominance in a peer group (by acting like a bully to be accepted by bullying peers), or to attract interest from the opposite sex. Therefore, finding that both boys and girls are equally involved in all types of bullying perpetration highlights the need to study both gender groups rather than focus exclusively on boys regarding direct bullying and on girls in terms of indirect bullying.

With regard to victimisation, it was found that both gender groups were exposed equally to physical and verbal bullying, whereas girls experienced more social-relational victimisation. Owing to the small effect size, however, this gender difference in social-relational victimisation has little meaning. The fact that both genders were victimised at an equal rate for all forms of bullying is consistent with several international findings (Beckman et al., 2013; Kelly et al., 2015).

9.6.2 Ethnicity. With regard to ethnic group differences, statistically significant differences were found in the means of the groups for all dependent variables—with the exception of social-relational bullying victimisation. Whereas the corresponding effect size was large for verbal bullying perpetration, medium effect sizes were found for physical bullying perpetration and victimisation, as well as for verbal bullying victimisation. In all four cases, the black Southern Sotho-speaking participants obtained significantly larger mean scores compared to the white Afrikaans-speaking participants. This implies that black Southern Sotho-speaking preadolescents were involved in direct types of bullying to a greater degree than white Afrikaans-speaking preadolescents were. Therefore, this study contributes to the small body of literature finding ethnic or cultural differences in bullying (Albdour & Krouse, 2014; Álvarez-García et al., 2015; Kahle & Peguero, 2015; Reddy et al., 2013). In the case of social-relational bullying, however, only a small effect size was obtained, in the case of bullying perpetration, and no significant differences regarding victimisation existed

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

between ethnic groups. Different rates of involvement highlight the need not only to examine ethnic group differences in overall levels of bullying, but rather to investigate whether these groups differ in terms of specific forms of bullying.

Ethnic group differences in bullying may result from exposure to different home environments and parent child-rearing behaviour. Various researchers (e.g., Chao & Aque, 2009; Yuwen & Chen, 2013) have demonstrated that adolescents from collectivistic cultures experience parental control that is more behavioural and psychological compared to adolescents in individualistic cultures. Thus, if it is assumed that the Southern Sotho culture largely represents a collectivistic society, then it could imply that the parents of the Southern Sotho-speaking participants might have employed parental control tactics to a greater degree. Seeing that ethnicity did not moderate the relationships between parenting dimensions and bullying, these high levels of parental control behaviour will result in the same detrimental consequences in the Southern Sotho culture as it would in Western cultures (i.e., higher rates of direct bullying perpetration and victimisation).

Instead of characteristics possibly inherent in the culture, the context in which people live may rather determine which parenting methods parents use. For example, compared to other ethnic groups in South Africa, the black cultures experience higher rates of poverty and lower socioeconomic status (Statistics South Africa, 2014). As poorer communities are more exposed to crime or violence (Friedson & Sharkey, 2015), socioeconomic status might instead contribute directly to increased bullying. Alternatively, socioeconomic status may contribute indirectly to bullying among Southern Sotho-speaking participants by influencing the type of parenting employed (i.e., higher use of control behaviour to ensure the safety of the child). As this factor was not measured, the degree to which black and white participants differed significantly in their socioeconomic status is not known. Even though Chao and Kanatsu (2008) found that socioeconomic status did not explain more variance in parenting dimensions apart from those explained by cultural factors, the lack of similar research in South Africa implies that the relative contribution of each of these variables is yet to be determined.

9.7 Chapter Summary

It has long been hypothesised that processes inherent in the family contribute to child and adolescent problem behaviour, including bullying. However, only some studies have

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

investigated empirically how parenting dimensions and attachment contribute to preadolescent bullying. Even less research has been conducted regarding how parenting and attachment interact to give rise to bullying. Thus, it is time for researchers to determine *how* parents exert their influence, as well as for *which groups* of preadolescents this influence would have the most detrimental consequences. Therefore, the current study is the first to utilise a Free State sample of preadolescents to determine the degree to which different parenting dimensions contribute to specific forms of bullying, and whether such relations differ across gender and ethnic groups. Furthermore, the current study set out to determine the role of attachment between parenting and bullying, as well as whether there are significant differences between gender and ethnic groups in terms of involvement in bullying.

Although prevalence rates were not determined, the fact that 46.29% of the 1078 learners provided their names for assistance with bullying-related problems provides a rough indication regarding the seriousness of this problem. Compared to levels of bullying perpetration, victimisation occurs at a higher rate. Additionally, verbal bullying was found to occur more frequently relative to other forms of traditional bullying perpetration and victimisation. Involvement in cyberbullying was low for this sample of preadolescents, possibly due to social media age restrictions, underdeveloped phone and Internet skills, financial constraints, and/or parental monitoring over online behaviour.

Parenting dimensions explained only a small proportion of the variance in all types of bullying, with perceived parental psychological control accounting for the majority of this variance in each case. However, the corresponding effect sizes were found to be small, suggesting that the influence of parenting dimensions on bullying is of little practical importance. Whereas a negative relationship was found between parental acceptance and bullying, firm control and psychological control correlated positively with all types of bullying perpetration and victimisation (excluding the correlation between firm control and social-relational bullying perpetration). Gender and ethnicity did not moderate any of the relationships between parenting dimensions and bullying significantly, suggesting that parenting dimensions have similar effects on bullying, regardless of the preadolescent's gender or ethnicity.

Furthermore, the present investigation provides more support for models of mediation than for models of moderation. Whereas attachment mediated most of the relationships between perceived parental acceptance and bullying, it mediated only the associations

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

between perceived parental firm control and physical and verbal bullying perpetration. Thus, it appears more accurate to regard attachment as emerging from parenting dimensions and that it subsequently influences acts and experiences of bullying. Minor evidence was found for a moderator effect: Attachment interacted with parental acceptance only to influence verbal bullying perpetration. Preadolescents who engage in verbal bullying perpetration seem to be a distinct group for whom attachment does not mediate the relationship between perceived parental acceptance and bullying. Instead, perceived parental acceptance and attachment are independent variables that interact to influence the levels of verbal bullying. With regard to perceived parental psychological control, it appears that bullying is explained better by direct effects models, rather than by models of interaction between parenting and attachment.

Whereas no meaningful gender differences were obtained, ethnic groups differed in their level of involvement in direct bullying perpetration and victimisation (i.e., physical and verbal) but not in their involvement in social-relational bullying. More specifically, black Southern Sotho-speaking preadolescents were involved in both forms of direct bullying perpetration and victimisation to a greater degree compared to white Afrikaans-speaking preadolescents. Although it is not entirely clear, it is believed that factors such as different parent child-rearing practices, cultural values, and/or lower socioeconomic status might predispose black Southern Sotho-speaking preadolescents to engage in and/or experience bullying to a greater degree.

The next chapter discusses the implications and practical applications of these findings, in addition to the strengths and limitations of the current study. Recommendations for future research are provided, with a final summary concluding the outcomes of this study.

Chapter 10: Contributions, Recommendations, and Conclusion

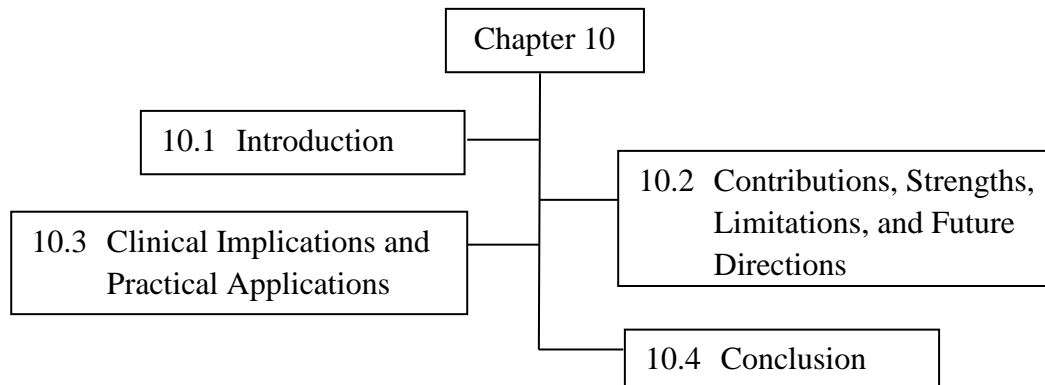


Figure 22. Outline of Chapter 10.

10.1 Introduction

The current study aimed to investigate the role of parent-child attachment in the relationships between perceived parenting dimensions and different types of bullying perpetration and victimisation among preadolescents. In Chapter 9, the associations that were found between these variables were explained by referring to relevant literature and theories. In this chapter, the discussion focuses on the theoretical contributions, strengths, and limitations of this study. In so doing, recommendations for future research are given. Next, practical applications and guidelines (informed by the findings of the study) are provided. In this way, the study adheres to the principles of a scientist-practitioner model where empirical research findings can be used in applied practice, thereby reducing the gap between research and practice (Overholser, 2015). The outline for this chapter is presented in Figure 22.

10.2 Contributions, Strengths, Limitations, and Future Directions

The current study makes several contributions to the local and international knowledgebase on preadolescent bullying. These contributions include information on the current state of bullying in the Free State Province and how variables at different levels of analyses interact to give rise to acts and experiences of bullying. Moreover, the current study provides insights on whether these interactions vary across gender and ethnic groups, as well as how these groups differ in their rates of bullying perpetration and victimisation experiences. This section also focuses on several strengths of the study, including the use of continuous variables, several dimensions of parenting, and different types of bullying perpetration and victimisation. Strengths regarding the sample are also mentioned. Each of

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

these contributions and strengths are discussed in the sections to follow, whereafter attention is given to the limitations of this study.

The current investigation adds to the limited body of knowledge on bullying occurring in South Africa, more specifically the Free State (one of the provinces with consistently high levels of bullying). In addition to examining simple correlations, this study firstly investigated—at multiple levels of analyses—how variables interact to lead to preadolescent bullying. Thus, information gained from this study expands the small body of literature examining how parent and child characteristics interact to determine the risk for bullying. For example, the present study is one of few to investigate whether and how preadolescent ethnicity could alter associations between parenting dimensions and bullying. Secondly, few studies have investigated empirically whether attachment may function as the process by which parenting dimensions exert their influence on preadolescent developmental outcomes (i.e., mediation), causing this study to fill an important gap in current literature on bullying. In fact, the current study clarified the role of parent-child attachment (i.e., mediator versus moderator) in the relationships between perceived parenting dimensions and bullying. Thus, examining the interaction between parenting dimensions and attachment would provide a more comprehensive interpretation of the etiology of preadolescent bullying perpetration and victimisation. Thirdly, the study made use of continuous variables to ensure that all statistical information could be included in the analyses (Power, 2013), while simultaneously promoting a dimensional perspective to the study of psychopathology. Fourthly, the effects of individual parenting dimensions (i.e., acceptance, firm control, and psychological control) on different types of bullying (i.e., physical, verbal, and social-relational) were examined, allowing the researcher to investigate possible pathways of equifinality and multifinality. Fifthly, the study made use of a large number of participants from numerous schools across the Free State province, thereby maximising external validity. Finally, the research participants were from the two dominant ethnic groups found in the Free State province (i.e., Afrikaans and Southern Sotho), which ensures that the results can be generalised to and utilised with many preadolescents in this province.

In spite of these contributions and strengths, the current investigation also presented with a number of potential limitations, which should be considered for future research. Included in this discussion are limitations regarding the characteristics of the sample, uncertainty regarding the conceptualisation of parental control, and potential shortcomings regarding the methodology (including the measuring instruments) as well as the research

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

design. Furthermore, it is recommended that future studies should include additional constructs as possible explanatory mechanisms between parenting dimensions and bullying. Finally, it is suggested that future studies should delineate the reasons why black Southern Sotho-speaking preadolescents are at an increased risk for direct bullying perpetration. Next, each of these limitations is discussed in more detail.

Firstly, the sample included non-clinical Afrikaans- and Southern Sotho-speaking preadolescents in the Free State; therefore, the results cannot be generalised to clinical samples, other age and ethnic groups, or other provinces. A fruitful avenue of research would be to replicate the study with other ethnic or provincial groups, to determine whether the extent to which parenting influences bullying is similar cross-culturally or across provinces.

Secondly, some conceptual confusion surrounds the construct of parental control. Although most studies (including the current investigation) differentiate between behavioural (firm control) and psychological control, authors have recently argued that these dimensions of parenting should not be restricted to a specific target of parenting (i.e., overt behaviour versus thoughts and emotions) (Grolnick & Pomerantz, 2009; Soenens & Vansteenkiste, 2010). It is argued that when behavioural control and psychological control are defined as merely exercising control over a child's behaviour and psychological experiences respectively (e.g., Barber, 1996), it may fail to acknowledge the effect of the different forms of parental control on all areas of a child's functioning. For example, parents may apply structure (behavioural control technique) to their child's thoughts and feelings (psychological domain). For example, by highlighting the relation between actions and outcomes, parents can use structure to facilitate a child's internalisation of morals and values (Grolnick & Pomerantz, 2009). Similarly, psychological control not only entails parents pressurising their child to think and feel in a certain way, but also may involve pressure in a behavioural domain; coercing children to act or behave in certain ways (Soenens & Vansteenkiste, 2010). For example, parents may prohibit their child to participate in certain activities or affiliate with deviant friends (behavioural domain) by means of guilt (psychological control tactic). Therefore, several authors (e.g., Grolnick & Pomerantz, 2009; Soenens & Vansteenkiste, 2010) called for a refinement of the concept of control, proposing that a distinction should rather be made between structure (i.e., parenting characterised by guidance) and control (i.e., parenting characterised by pressure and intrusion), instead of multiple forms of control.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The third potential limitation pertains to methodology. All variables were measured by using self-reports that were completed only by the preadolescents, which possibly implies that the correlations observed between the variables are exaggerated (Fousiani et al., 2016). Even though the questionnaires were completed anonymously, participants still could have altered their answers so that they would appear socially desirable, or withheld truthful answers for fear of getting into trouble. Therefore, including alternative forms of assessing bullying (e.g., peer nomination, teacher reports, and parent reports) and parent-child interactions (e.g., direct observation or parent reports) in addition to participant self-reports could make the findings more robust. The inclusion of assessments that are more objective (e.g., direct observation) together with preadolescent self-reports can be considered in further studies to compare similarities in results, and determine which perspective (i.e., objective ratings by the researcher or preadolescent subjective experiences) is more likely to predict involvement in bullying. However, considering that one of the strengths of the study was the large number of participants, including additional methods of assessment could have resulted in increased rates of refusal to participate. Thus, for the purposes of this study, self-reports were deemed appropriate. Therefore, it should be emphasised that the findings reflect only the subjective experiences reported by the preadolescents, and results should be interpreted in this context.

Thirdly, limitations concerning the measures used to assess the constructs warrant attention. The first concern pertains to the developmental appropriateness of the cyberbullying items in the APRI-BT measure. For example, a study conducted with learners in the fifth and sixth grades found that, instead of negative or aggressive behaviour (e.g., posting negative comments or embarrassing pictures), participants were more likely to endorse behaviour reflecting teasing or joking (Holfeld & Leadbeater, 2015). In other words, the nature of cyberbullying (i.e., what it looks like) might vary according to age. In the current study, most of the cyberbullying items included words such as “negative” and “rude.” As learners cannot see the effect of the cyber actions, they might not consider their behaviour as harmful, even though they engage in acts that others would regard as cyberbullying. Potentially, this could explain why very few of the learners in the current study endorsed cyber behaviour, which highlights the need to refine the definition of bullying in a cyber context, or perhaps the wording of the items, especially in the period of preadolescence. Yet, the fact that both cyberbullying perpetration and victimisation rates were low perhaps could indicate that the current sample was too young to obtain adequate results needed to analyse the role of

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

parenting and attachment in the development of cyberbullying. Therefore, it is suggested that the study be replicated with an older sample of adolescents.

A second concern relates to the fact that the current study found that, compared to the other dimensions of parenting, firm control yielded the lowest reliability coefficients (0.589 – 0.617). Although the CRPBI-30 has been classified as a well-established measure (Alderfer et al., 2008), Soenens and Vansteenkiste (2010) note that the Firm Versus Lax Control scale of the CRPBI (and by extension, the CRPBI-30) contains items that tap into the different meanings for the construct of control. For example, this scale contains items that tap into the provision of structure (e.g., “My mother lets me do anything I like to do”) as well as externally pressuring control (e.g., “My mother gives hard punishment”). Therefore, it is unclear whether the relations obtained between this scale and child developmental outcomes is the result of parental provision of structure (or lack thereof), parental external pressure tactics, or perhaps a combination of both (Soenens & Vansteenkiste, 2010). Therefore, the results for firm control in the current study, including its associations with attachment and bullying, should be interpreted with caution. It is recommended that future studies attempting to research parenting dimensions would benefit from either improving the current version of the Firm Control scale (e.g., using factor analysis to delineate the different components of firm control), or by using an alternative measure to assess parental behavioural control.

A third concern pertains to the measure used to assess attachment. Some researchers have criticised the IPPA (and by extension the IPPA-R for Children) by stating that, because it does not correlate highly with the Adult Attachment Interview (AAI)—an assessment used to measure one’s state of mind regarding attachment—it means that it does not necessarily measure internal working models of attachment to parents (McElhaney et al., 2009). However, other studies state that different attachment measures assess internal working models that differ in their degree of automaticity, with the IPPA (and IPPA-R for Children) measuring models that function within one’s conscious awareness (Gorrese & Ruggieri, 2012). In other words, the attachment measure used in the current study provides insights into that component of attachment of which preadolescents are aware, and what they, as well as others, would like to believe. Along this line of reasoning, the lack of correlation between different measures of attachment does not necessarily imply that one of these measures is not measuring the construct of attachment (Bosmans & Kerns, 2015). As more research is conducted to expand the currently limited knowledgebase on attachment and its measurement during middle childhood and preadolescence, future researchers could consider including

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

additional tools to obtain a more holistic view regarding preadolescent attachment. For example, measuring internal working models that work out of individual conscious awareness could determine whether these would function in similar ways with regard to parenting and bullying. Thus, such studies could define at which level of consciousness internal working models are most affected by current parenting, as well as which of these models are most applicable in the development of bullying. Moreover, the IPPA-R for Children measures only perceived quality of attachment to a specific parent. Different styles of insecure attachment may reflect the specific functions of an aggressive behaviour (e.g., attempting to engage others, reacting to perceived rejection, or acting to gain control) (Moretti et al., 2004). Thus, examining which of these attachment styles are associated more often with bullying perpetration (or victimisation) will contribute to our understanding regarding the underlying function of these types of bullying. Thus far, it appears that, while the insecure anxious/ambivalent attachment style is related to bullying victimisation, bullying perpetration is rather associated with an insecure avoidant attachment style (Kõiv, 2012; Kokkinos, 2013).

Fourthly, the study made use of correlational and criterion-group research designs, collecting all information at the same point in time. Consequently, this would preclude conclusions regarding causal relationships among the variables. Although the current study focused on how parenting dimensions affected child involvement in bullying perpetration and victimisation, the reverse can also be true. In other words, uncertainty exists whether bullying is the cause or consequence of certain parenting dimensions, especially in the light of some studies finding that child or transactional effects become more dominant during preadolescence and adolescence (e.g., Fletcher & Johnston, 2016; Ma & Bellmore, 2012). For example, although the current study found that firm control and psychological control correlated directly with all types of bullying victimisation, it is also possible that parents engage in behaviour that is more controlling to protect their victimised preadolescent from being bullied further. Similarly, parents might employ psychological control tactics in an attempt to control their preadolescent's existing bullying perpetration (i.e., the systems principle of developmental psychopathology). Accordingly, longitudinal studies are needed to investigate the causal relations between parenting dimensions and bullying to elucidate developmental patterns between parenting and preadolescent behaviour across developmental periods. However, the models of mediation that were found in this study do provide some initial insights regarding the sequence of events in terms of parenting, attachment, and bullying.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The current study demonstrated that, whereas perceived parental acceptance and firm control mostly exerted their influence on bullying via the attachment relationship, perceived parental psychological control has a more direct effect on bullying. Therefore, theories other than attachment theory might be more appropriate in understanding the mechanism by which psychological control exerts its effects. In fact, Rutter and Sroufe (2000) caution against using only attachment principles as explanations for psychopathology, reminding researchers that other aspects of social relationships, or even other extra-relational variables, can account for problem behaviour. Thus, future studies should include additional models that examine constructs such as preadolescent peer attachment, moral disengagement, empathy, and internalising and externalising symptoms as possible mediators between parenting dimensions and bullying. In particular, as psychological control was found to be the most important parenting dimension in the development of bullying, it is imperative to identify factors that account for its mechanism of action. Expanding these models further to identify the processes by which attachment influences bullying (e.g., social cognition) would enhance the understanding of the mechanisms of effects observed in the current investigation. In the case of verbal bullying perpetration, attachment was found to interact with perceived parental acceptance to give rise to this type of bullying, which stands in contrast to the findings of all the other models involving parental acceptance in which attachment was found to act as a mediator. It was hypothesised that preadolescents who mainly use verbal bullying tactics might be a distinct group. Seeing that the degree of overlap between different types of bullying extend beyond the scope of the present investigation, a natural extension could be to determine groups of individuals who participate in different, overlapping forms of bullying. Once such groups have been identified, analyses could be conducted to determine the effect of parental acceptance and attachment on verbal bullying perpetration. In this way, it could perhaps be determined whether the moderating effect of attachment is applicable to preadolescents who engage only in verbal bullying (thus marking this group as distinct), or whether the finding can be observed also in preadolescents who engage in other (multiple) forms of bullying perpetration as well. Seeing that verbal bullying is the most prevalent form of bullying, it remains imperative to understand how this form of bullying, or preadolescents who employ this type of bullying, might differ from the rest.

Finally, as ethnicity was found to be a risk factor for bullying involvement, future studies need to investigate why black Southern Sotho-speaking participants are at such an increased risk for direct bullying. For example, ethnicity is often confounded with

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

socioeconomic status, making it important for future studies to include economic indices in their analyses to be able to disentangle the effects of ethnicity and socioeconomic status. Furthermore, investigations could focus on measuring parenting dimensions (i.e., acceptance, firm control, and psychological control) in the Southern Sotho culture, to determine whether these significantly differ in frequency from those found in more individualistic, Westernised cultures. Additionally, studies can examine whether other contextual factors such as alternative living arrangements often found in the Sotho culture (i.e., living with extended family members) (Sibanda, 2011) have implications for involvement of preadolescents in bullying. Therefore, examining socioeconomic status in addition to parenting and living arrangements may clarify the potential cause(s) for increased involvement in bullying. Possible cultural differences regarding the acceptability of aggression and bullying could also be investigated, which in turn would inform anti-bullying media campaigns.

10.3 Clinical Implications and Practical Applications

First, the results reveal that bullying, especially for verbal bullying is still a common occurrence for preadolescents residing in the Free State. The fact that verbal bullying perpetration occurred most frequently might imply that this is the easiest form of bullying to enact. This may be accounted for partially by the fact that teasing forms part of the definition of verbal bullying. Teasing is regarded as a common communication tool used among children and adolescents (Mills & Carwile, 2009). However, preadolescents might find it difficult to distinguish between playful and malignant teasing. Consequently, preadolescents might employ harmful teasing or perceive harmless teasing as malicious. Therefore, preadolescents could attend workshops on how to distinguish between these two forms of teasing (i.e., how to balance play or humour with challenge or aggression). Moreover, as verbal bullying perpetration targets not only an individual but can also attack his or her family background, religious, and ethnic or racial group affiliation (Coertze & Bezuidenhout, 2013), it is imperative that preadolescents continue to be educated and sensitised to diversity-related issues either by studying it in their life orientation subject, or by attending workshops.

The second implication of this study concerns the findings on cyberbullying. Even though the findings of this study suggest that cyberbullying occurred at such a low rate that further analyses could not be conducted, it does not mean that cyberbullying is not occurring at all in this age group. Thus, it will be wise to continue to educate learners on how to handle such incidents, so that they are able to equip themselves with the necessary skills before such

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

incidents occur more regularly during adolescence. In fact, several studies (e.g., Bauman, 2010; Wang, Ianotti, et al., 2012) emphasise the need to implement cyberbullying prevention and intervention programmes as early as possible (during the early years of primary school) and increase its intensity as children progress through adolescence.

Third, the lack of meaningful gender differences in different types of bullying perpetration and victimisation discredit the popular beliefs that only boys are involved in direct forms of bullying and that girls employ only social-relational bullying tactics. Such knowledge implies that teachers and parents need to be vigilant of and be able to identify different forms of bullying in both genders, especially social-relational bullying in boys, as popular beliefs dictate that this form of bullying does not occur in the male population. These findings imply that both boys and girls should be taught how to identify, prevent, and intervene in acts of direct and indirect bullying. The finding that ethnicity served as a significant risk factor for bullying justifies further investigation into the Southern Sotho cultural group to delineate the individual and contextual factors responsible for their increased involvement in bullying. In turn, these factors may inform culture-specific anti-bullying programmes. For example, if it is found that black Southern Sotho-speaking participants are exposed to harsh or controlling parenting more frequently, parental programmes could be implemented, for example to lower the levels of parental control.

The fourth implication of the results of the study concerns the relationships between parenting dimensions and attachment. These variables, especially perceived parental acceptance and attachment, were correlated significantly. Thus, despite the popular belief that an individual's current security of attachment is influenced mainly by early parenting behaviour and cannot be altered, research (including the current study), suggests that the attachment bond during preadolescence may still be influenced by current parenting behaviour, which can preserve or alter the quality of the current parent-child attachment bond (Beijersbergen et al., 2012; Booth-LaForce et al., 2014; Bosmans, 2016). Thus, parents should be encouraged to display accepting behaviour toward their preadolescents continuously to maintain the security of the attachment relationship and consequently reduce the risk of becoming or remaining a perpetrator or victim of bullying. Furthermore, the significant negative relations between forms of parental control and attachment security is evidence that during the developmental period of preadolescence, which is marked by increased needs for autonomy, providing appropriate levels of control is imperative in maintaining a secure parent-child attachment relationship. Thus, parents should be guided in balancing monitoring

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

and disciplining of their preadolescents with allowing them enough freedom to explore their environments and manage social situations autonomously. Therefore, appropriate parenting during this developmental period should encourage psychological autonomy, while still providing adequate behavioural control (i.e., monitoring and rule setting). These control efforts should be supplemented by warm and accepting parent-child exchanges.

Numerous researchers (e.g., Bibou-Nakou et al., 2013; Bowes et al., 2013; Strumpher & Wannenburg, 2014; Shetgiri et al., 2012; Wong et al., 2014) have advocated for the inclusion of parents in anti-bullying interventions or for existing programmes to be modified to make the parenting component more intensive. In fact, a meta-analysis conducted by Ttofi and Farrington (2011) confirmed that parental involvement was one of the most effective programme components, as it was associated with a significant decrease in bullying perpetration and victimisation. Parenting interventions should not only include arranging parent-teacher meetings and providing parents with information regarding bullying, but also assist parents in identifying and improving any suboptimal or inappropriate behaviour they might display. Preadolescence is an important developmental period marked by various biological, cognitive, and socioemotional changes that may be affected by parents either positively or negatively. Therefore, to comprehend the role of parents in the onset or maintenance of bullying, it is important to understand how parents may contribute to the developmental processes of a preadolescent. In turn, such insights may inform anti-bullying interventions. Therefore, regardless of preadolescent gender, similar parenting interventions can be implemented against bullying. Likewise, the finding that the parenting-bullying association is similar across ethnic groups implies that the parenting theories and interventions developed with predominantly white or Westernised samples would be appropriate for use in the black Southern Sotho culture as well (Windle et al., 2010). Subsequently, ethnically diverse parents from the Free State would be given similar guidelines and interventions regarding behaviour in a specific parenting dimension to reduce the frequency of preadolescent bullying involvement.

Traditionally, researchers have linked parenting and child behaviour by making use of the principles of social learning theory (Bandura, 1973). However, studies are gradually investigating whether parents may exert their influence through additional mechanisms. Such explanations may become even more important in older samples, as preadolescents and adolescents spend less time with their parents. The current study confirmed that, in addition to the influence of direct observations and interactions, bullying might be explained through the

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

principles of attachment theory. Therefore, to refine therapeutic interventions, it is necessary to determine which variables related to parents should be the focus of anti-bullying interventions: parenting behaviour, parent-child attachment, both, or neither. As psychological control explained most of the variance in all types of bullying perpetration and victimisation, parenting programmes should focus on this dimension of parenting in particular.

The role and content of parenting programmes may differ, depending on whether a mediating or moderating effect was found for attachment. In the case of mediator models, interventions would focus mainly on improving the parenting dimensions, namely parental acceptance and firm control. There would be a subsequent decrease in most types of bullying perpetration and victimisation, as the effects of improved, age-appropriate levels of behavioural control and acceptance would be accounted for by the increase in the quality of the parent-child attachment bond. Therefore, if parents modify their behaviour to align with the developmental needs of their child, preadolescents will feel more secure in using their parents as a safe haven during times of distress and explore their social environment with more confidence (i.e., secure base). This attachment bond will also provide the context in which preadolescents can learn valuable socioemotional skills, which they can apply in their peer contexts to navigate social interactions. These skills may include emotional regulation, empathy, identifying negative emotions, developing adaptive coping techniques, conflict management skills, communication skills, and the ability to open up and discuss emotional topics (Brumariu, 2015; Diamond, Fagundes, & Butterworth, 2012; Shomaker & Furman, 2009; Zimmer-Gembeck et al., 2015). In the process, preadolescents will value themselves as worthy of acceptance and interpret social information and others' emotional states with more accuracy, which will reduce the need to engage in bullying perpetration or appear as easy targets for bullies. However, because parenting dimensions explained only a small variance of bullying perpetration and victimisation, these parenting sessions would most likely run parallel to individual child sessions and/or other interventions (e.g., focusing on peer dynamics) that focus on improving the deficits in the socioemotional skills that contribute to bullying.

With regard to moderator models, interventions would need to focus on changing both variables that contribute to bullying. Therefore, in the case of verbal bullying perpetration, merely targeting the parent's child-rearing behaviour would not be enough. In addition, interventions would need to focus on enhancing the quality of the parent-child attachment bond, before any reduction in verbal bullying perpetration will be observed. Thus, in the case

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

of verbal bullying perpetration, parents should be encouraged to engage in increased acceptance behaviour and participate in interventions that aim to improve the parent-child attachment bond. As the parent-child relationship becomes more like a cooperative partnership during preadolescence, sessions need to involve both the preadolescent and parent and focus on adjusting their attributions and attachment strategies needed to preserve the attachment relationships (Kobak et al., 2006). Internal working models become increasingly resistant to change as they become habitual and direct an individual's attention to and create interpretations of social or environmental information that is consistent with that person's representations (Bowlby, 1973, 1980; Hazan & Shaver, 1994; Pietromonaco & Barrett, 2000). In other words, insecure attachment predisposes the individual to interpret new attachment information negatively, even if the attachment figure's behaviour appears supportive and responsive to the objective observer (Bosmans, 2016). Thus, incorporating cognitive interventions in an attempt to rectify any misinterpretations that the preadolescent might have could serve as a valuable component of the therapeutic plan that attempts to restore the parent-child attachment bond. In this way, the preadolescent is provided with reassurance in the responsiveness and availability of the parent, thereby altering his or her representation of others. Similarly, Bosmans (2016) suggests that "the therapist simultaneously works with (1) the child/adolescents' information processing biases and attachment expectations and with (2) the parents' skills to provide sensitive support for the child's experienced attachment ruptures" (p. 324). Thus, such improved internal working models would be generalised to and guide the preadolescent's behaviour in other contexts, including peer groups. Again, parenting dimensions explained only a small variance of bullying perpetration and victimisation. Therefore, these individual and/or combined parent and child sessions addressing the parent's behaviour, the child's attachment expectations, and the quality of the parent-child attachment bond would most likely run parallel to individual child sessions focusing on improving the deficits in the socioemotional skills that contribute to bullying. In fact, Bosmans (2016) hypothesises that such sessions focusing on attachment could be integrated easily into traditional cognitive-behavioural therapy interventions aimed at enhancing social skills of parents and/or children and clear up cognitive distortions.

In consideration of the discussion above, the following guidelines can be provided to practitioners who work with preadolescents involved in bullying. Initially, assessments can be conducted to determine in which roles, or types of bullying the preadolescent is involved currently. Moreover, practitioners can evaluate preadolescents' perceptions regarding their

parents' behaviour and the quality of the attachment bond they currently have with their parents. This will allow the practitioner to determine how best to involve the parents in the therapy plan, such as whether to focus on improving the quality of parenting behaviour, the attachment bond, or both. Most likely, such sessions would be conducted in addition to the preadolescent's individual therapy sessions aimed at assisting preadolescents to look beyond their existing attachment-related biases and improve any deficits in socioemotional skills. However, practitioners should be aware of the fact that preadolescents most likely engage in multiple bullying roles (e.g., perpetrator and victim) or types of bullying (e.g., physical and verbal bullying perpetration) simultaneously. Furthermore, practitioners should also be familiar with the concepts of equifinality (different parenting dimensions resulting in similar roles or types of bullying) and multifinality (similar parenting dimensions resulting in different roles or types of bullying). Equipped with such knowledge, practitioners would know that most parenting interventions would likely incorporate several of the strategies discussed in this chapter. For example, if it is found that a preadolescent engaged only in physical bullying perpetration, the practitioner need to determine which of the parenting dimensions most likely contributed to this behaviour: high levels of firm control or psychological control, or low levels of acceptance. It is also possible that the preadolescent perceives his or her parent as involved in more than one of these inappropriate levels of caregiving. Therefore, the practitioner would need to guide the parent in developing more suitable behaviour, which can be done in the presence of the preadolescent. Alternatively, it may be found that the preadolescent frequently engages in both physical and verbal bullying perpetration. In this case, interventions would need to not only focus on improving parental behaviour, but also enhance the quality of the attachment bond—if it was reported that the parent displayed low levels of acceptance. In the context of verbal bullying, it appears as though attachment may have a significant role in determining the levels of bullying perpetration. As verbal bullying is the most prevalent form of bullying, improving the attachment bond between parents and younger children and continuing to enhance this relationship during the preadolescent years remain imperative. As discussed, this could be achieved by conducting individual parent and child sessions, in addition to joint sessions.

10.4 Conclusion

The current study aimed to clarify the role of parenting dimensions and parent-child attachment in the development of preadolescent bullying perpetration and victimisation experiences. More specifically, the intervening role of parent-child attachment as either a

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

mediator or a moderator in the relationships between different perceived parenting dimensions (acceptance, firm control, and psychological control) and bullying (physical, verbal, social-relational, and cyber) was determined. For demographic factors, the present investigation aimed to determine whether the relationships between perceived parenting dimensions and bullying were moderated by gender and ethnicity, and to examine whether there were any differences in types of bullying across gender and/or ethnic groups.

This study was conducted within the context of the DPM, a conceptual framework that aims to expand one's understanding of normal and problem child behaviour by integrating principles from various theoretical backgrounds. Emphasis is placed on identifying risk and protective factors across levels of analyses to delineate the multiple pathways to and from child behaviour. In addition to identifying these factors, developmental psychopathologists are interested in studying how these factors interact to determine the course of development; hence, the importance of studying mediators and moderators. Accordingly, the current study examined the interactions among multiple variables (i.e., perceived parenting dimensions, parent-child attachment, gender, and ethnicity) across individual (e.g., gender and attachment) and contextual domains (e.g., parenting dimensions and ethnicity) to determine the possible pathways towards involvement in specific types of bullying (physical, verbal, social-relational, and in cyberspace) as either a perpetrator or victim.

Evident from Chapter 3, is that the phenomenon of bullying has been studied only empirically in the late 20th century, although it has been around for centuries. Gradually, research on bullying regarding its conceptualisation, prevalence, risk and demographic factors, developmental outcomes, and measurement has increased. Still, substantially less research has been conducted in South Africa compared to many other countries. Although the definition of bullying is still a debatable topic, most researchers have come to accept the definition originally provided by Olweus, namely that the core defining criteria for bullying include an intention to do harm, repetition, and a power imbalance between the bully and victim. Additional definitional components (e.g., provocation and victim distress) are even more disputed. For cyberbullying, many researchers simply apply the definition of traditional bullying to an electronic context. However, cyber-specific criteria such as anonymity and publicity challenge the meanings and relative importance of the core components that make up the definition of traditional bullying. Other uncertainties exist in the literature on bullying, including conceptualising cyberbullying as a form of direct or indirect bullying, as well as the degree of overlap between traditional bullying and cyberbullying. Even though researchers

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

have identified numerous risk factors involved in the development of bullying, less research has been conducted on identifying factors unique to specific forms of bullying.

South African bullying prevalence rates are comparable to those found internationally, with victimisation rates consistently higher than bullying perpetration rates, verbal bullying being employed and experienced more frequently than other forms of bullying, and traditional bullying occurring at a higher rate than cyberbullying. Bullying is a highly prevalent phenomenon during preadolescence, with boys more frequently involved as either bullies or bully-victims (especially in direct bullying), but girls would be as likely, or even more likely, to engage in social-relational forms of bullying. In contrast, no consistent gender trends have been found for cyberbullying perpetration or victimisation, nor have any patterns emerged for the involvement of different ethnic or cultural groups in traditional or cyberbullying.

The developmental outcomes of involvement in bullying (irrespective of role or domain) is associated with an array of psychosocial, behavioural, and school-related problems on individual and contextual levels, with bully-victims often presenting with the most severe psychosocial problems yielding both perpetrator-like and victim-like profiles.

Self-reports appear to be the technique utilised most frequently for measuring bullying, and can assess bullying from either a definition- or behavioural-based approach. Moreover, these self-reports can either measure bullying in the form of categories (i.e., bully, victim, bully-victim, and non-involved), or as continuous variables. The latter approach has the benefit of labelling learners' behaviour instead of the learner themselves. After careful consideration, it was decided that the APRI-BT was the measure most applicable for use in the current research study.

Parenting consistently emerges as one of risk factors that correlate highly with both traditional bullying and cyberbullying (Chapter 4). Literature on parenting behaviours clarifies that this topic can be studied from two major perspectives; namely the dimensional- (i.e., how individual parenting dimensions affect outcome variables) and typological approach (i.e., how parenting dimensions are combined to form styles that influence outcome variables). In the dimensional perspective, three core parenting dimensions have emerged, namely parental acceptance versus rejection, firm control versus lax control, and psychological autonomy versus psychological control. Whereas high levels of perceived parental acceptance and psychological autonomy are associated with preadolescent well-

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

being; the effects of firm (behavioural) control is dependent on how firm control is operationalised.

Although child and interaction effects become increasingly more dominant during preadolescence, parenting behaviour still exerts a significant influence on preadolescent developmental outcomes. Two perspectives have emerged in literature on parenting regarding the role of child gender, namely the differential exposure- (i.e., gender differences in bullying result from parents treating boys and girls differently) and susceptibility perspectives (i.e., similar parenting behaviour has different effects on boys and girls). Similarly, the role of ethnicity in the association between parenting dimensions and preadolescent behaviour can be understood from two opposing standpoints. These include the ethnic equivalence model (i.e., universalistic perspective on the effects of parenting) and cultural values model (i.e., the values of a specific culture would determine the type and effect of parenting behaviour on adolescent outcomes). However, limited research on the effects of gender and ethnicity is reported in literature on traditional bullying and cyberbullying. Although numerous measurement techniques exist to assess parenting dimensions from the preadolescent's perspective, the current study utilised the CRPBI-30 self-report.

Apart from its direct effects, parenting may also exert its influence on preadolescent bullying by way of attachment. The parent-child attachment bond, discussed in Chapter 5, allows the parent to function as a secure base and a safe haven. Secure attachment allows preadolescents to remain emotionally connected to their parents, while simultaneously exploring their environment and becoming autonomous. At a representational level, this attachment relationship is represented in the form of internal working models of self and others—constructs used to explain how behaviour and expectations in parent-child interactions generalise to extra-familial interactions. These representational models may also influence a child's exploration behaviour and development of social skills, the processing of social information in peer interactions, and the ability to understand others' mental states and emotions. However, uncertainty still exists regarding the stability of these working models, with some studies finding support for the prototypic perspective, whereas others instead support the revisionist perspective. Nevertheless, it has been found consistently that the quality of these parent-child attachment relationships depends on past and current parenting dimensions, particularly parental acceptance. In turn, security of attachment is associated with a variety of positive developmental outcomes, whereas attachment insecurity is rather linked with maladaptive adjustment such as aggression and bullying perpetration and victimisation.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Uncertainty about how attachment is best measured during preadolescence exists, with the current study utilising the IPPA-R for Children to capture the degree of security in the preadolescent's current attachment relationship with his or her primary caregiver.

Limited research exists regarding how perceived parenting dimensions and parent-child attachment interact to give rise to preadolescent developmental outcomes, with no studies thus far conducted on bullying (Chapter 6). As bullying perpetration and victimisation may result in detrimental developmental consequences, including the development of clinical disorders, it is imperative that more information is gathered on *who* will most likely engage in bullying perpetration or victimisation (moderation) and *why* (mediation). By testing attachment as a mediator and a moderator in the relationships between perceived parenting dimensions and bullying, it can be shown statistically which model best explains associations among multiple variables.

As described in the Methodology chapter (Chapter 7), the objectives of the current study were achieved by conducting a quantitative, non-experimental type of study. A correlational research design and a criterion group design were used. The sample comprised 1078 preadolescents (white Afrikaans- and black Southern Sotho-speaking boys and girls) from twenty-four primary schools from across the Free State Province. Participants completed four questionnaires in either English or Afrikaans, whereafter the Cronbach alpha coefficients were calculated to ensure acceptable levels of internal consistency. Hierarchical regression analyses, moderated hierarchical multiple regression analyses, and analyses of variance were conducted for each of the three research hypotheses respectively, in which effect sizes were calculated as a measure of practical importance. Throughout the entire research process, the researcher adhered to ethical principles of beneficence, non-maleficence, autonomy, confidentiality, justice, fidelity, and integrity to ensure that the study was conducted ethically.

In the final chapters of the study (i.e., Chapter 8, 9, and 10), the results were presented, along with a theoretical discussion of the findings and their practical implications. The contributions, strengths, limitations, and recommendations for future studies were also discussed.

This study demonstrates the seriousness of bullying among Grade 5 and 6 learners, as 46.29% of the 1078 learners provided their names for assistance with bullying-related problems. More learners reported to be involved in bullying as victims as opposed to

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

perpetrators. With regard to bullying perpetration and victimisation, verbal bullying was the specific type found to occur most frequently, possibly because of the period of preadolescence and the fact that teasing forms part of its definition. Involvement in cyberbullying was low for this sample of preadolescents, most likely due to age restrictions in social media, underdeveloped phone and Internet skills, financial constraints, and/or parental monitoring of online behaviour. Therefore, preadolescents would benefit from attending workshops distinguishing between malign and non-malign teasing and focusing on the dangers inherent in cyberbullying.

In line with a developmental psychopathology perspective, this study illustrated the concepts of equifinality and multifinality. Different parenting dimensions may contribute to involvement in similar types of bullying perpetration or victimisation (equifinality), and the same parenting dimension is correlated with different types of bullying (multifinality). Whereas a negative relationship was found between perceived parental acceptance and all forms of bullying, perceived parental firm control and psychological control correlated positively with all types of bullying perpetration and victimisation (excluding the correlation between firm control and social-relational bullying perpetration). Although perceived parental psychological control accounted for the majority of the variance, the study demonstrates that no one dimension of parenting can be singled out as the sole contributor to preadolescent bullying. With regard to attachment, the current study found a strong positive correlation between perceived parental acceptance and parent-child attachment but negative correlations between both forms of parental control and attachment. These findings indicate that parenting dimensions are still important factors to consider in the quality of preadolescent attachment.

The present investigation also investigated how factors in multiple domains of functioning interacted to give rise to bullying. Incorrect assumptions could be made if only one level or variable is studied in isolation. For example, without examining the interaction of demographic variables with parenting dimensions, it could be assumed incorrectly that the same parenting dimension has similar or different effects on bullying across different gender and ethnic groups. Evident from the current study is that the parenting-bullying link was moderated by neither preadolescent gender nor ethnicity. Similarly, it could be assumed easily that in all types of bullying, parenting exerts its effects by altering the quality of parent-child attachment. Such a claim can be supported only by studying parenting dimensions and attachment simultaneously. As the results of this study indicate, however, there may be

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

alternative explanations depending on the parenting dimension and/or type of bullying under investigation.

More support was found for models of mediation than for models of moderation. In other words, it would be more accurate to regard attachment as emerging from parenting dimensions and subsequently influence bullying, rather than an independent factor that interacts with parenting to affect bullying. Attachment mediated most of the relationships between perceived parental acceptance and bullying, as well as the associations between perceived parental firm control and physical and verbal bullying perpetration. Thus, anti-bullying interventions should include parenting sessions—in addition to the preadolescent's individual sessions and school-based interventions—that focus on improving any inappropriate parental behaviour.

In contrast, attachment functioned as a moderator in the relationship between perceived parental acceptance and verbal bullying perpetration. Preadolescents who engage in verbal bullying perpetration may be a distinct group for whom attachment does not emerge from parental acceptance to influence bullying, although more research on this statement would be needed. Therefore, in terms of intervention, it would become crucial to include sessions focusing on improving parental behaviour and the quality of the parent-child attachment bond. Most likely, interventions would first focus on repairing the attachment bond, whereafter sessions will be conducted to correct inappropriate parental behaviour and suboptimal child socioemotional skills. In terms of perceived parental psychological control, it appears that direct effects models, rather than models of interaction between parenting and attachment, explain bullying better. Thus, if it is found that parents most often engage in these types of parenting behaviour, interventions should focus mostly on improving parental skills.

Finally, no meaningful gender differences in bullying were obtained. Such findings discredit popular beliefs that each gender group is involved in its own specific forms of bullying. Therefore, boys and girls should be educated similarly on how to intervene in each type of bullying. In contrast, ethnic groups differed in their level of involvement in direct bullying perpetration and victimisation (although not in their involvement in social-relational bullying). It is believed that factors such as different parent child-rearing practices, cultural values, and/or lower socioeconomic status could predispose black Southern Sotho-speaking preadolescents to engage in and experience bullying to a higher degree. Such findings

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

emphasise the importance of studying bullying in this particular ethnic group, as a higher risk for bullying involvement exists.

The study has many strengths, including using a large sample obtained from many schools across the province, involving the two dominant ethnic groups of the province in the sample, the use of continuous variables, investigating the interaction of variables at both individual and contextual levels of analyses, and examining the unique contribution of parenting dimension on different types of bullying perpetration and victimisation.

In spite of these strengths, several limitations are also inherent in this study. For example, the findings cannot be generalised to clinical samples, other age and ethnic groups, or other provinces. Conceptual confusion also surrounds the construct of parental control, thus deeming it necessary to refine this concept. Possible shortcomings in the measures were found, in addition to the research design. Evident from this study, attachment principles cannot explain all the relationships between parenting and bullying. Thus, future studies should include additional constructs as possible mediators and/or moderators, especially with regard to parental psychological control. For the models in which attachment did play a role, it is necessary to determine its exact mechanism of action in bullying. Thus, expanding the models to include constructs such as peer attachment or social cognition could be fruitful avenues of research. Finally, more research is needed to understand the moderating effect of attachment on parenting and bullying.

This study made several significant contributions to South African and international literature on bullying. Firstly, information regarding the current state of bullying in the Free State Province was provided. Secondly, the study clarifies the role of attachment as either a mediator or moderator in the relationships between various parenting dimensions and different types of bullying. In this way, a more comprehensive interpretation of the etiology of preadolescent bullying can be gained. In turn, this knowledge can inform *how* parents could be involved in anti-bullying interventions. In this way, the study adheres to the principles of a scientist-practitioner model by formulating and testing research hypotheses that are relevant to current mental health problems during preadolescence, thereby ensuring that the research findings can be applied in a practice-based setting (Overholser, 2015). Thirdly, the study is one of few to include ethnicity in its analyses. The knowledge gained confirms that parents from different ethnic groups do not necessarily have to undergo separate parent training sessions that differ in content. Also, the findings highlight that South African bullying

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

research should focus particularly on black Southern Sotho-speaking individuals, as they appear to be at an elevated risk for engaging in and experiencing bullying.

Despite the fact that parenting factors may become less prominent with increasing child age, parenting interventions focusing on parental behaviour and the parent-child attachment relationship still form a valuable part of anti-bullying interventions in this developmental period. The findings from this study confirm that by altering parenting dimensions and/or the quality of parent-child attachment, changes with regard to involvement in preadolescent bullying can be observed. Thus, the current investigation mainly contributes to the literature on bullying by providing guidelines on how parents could be involved in intervention and prevention practices.

Appendix A

Invitation to School Principals to Participate in a Research Study on Bullying

To (Principal/School)

My name is Mariska Carter, and I am a Psychology Doctorate (Research) student at the University of the Free State (UFS). I am conducting research on how a preadolescent's perception of parenting behaviours, as well as the quality of parent-child attachment contributes to bullying perpetration and victimisation amongst preadolescents.

This study is being conducted under the supervision of Dr. R. van der Watt and Prof. K.G.F. Esterhuyse (UFS). The Provincial Department of Education has given approval to approach schools in order to conduct my research among grade 5 and 6 learners. This research aims to determine whether there are any relationships between perceived parenting behaviours and different types of bullying perpetration and victimisation amongst preadolescents (10-12 year olds). This research is significant in that it could ultimately assist in improving or refining anti-bullying programs.

I am inviting you to participate in the research by collecting data in the form of self-report questionnaires from Grade 5 and 6 learners from your school and, if possible, before the end of the third term 2015. Informed assent and consent will be sought from the learners and their parents respectively prior to their participation in this study. Only those learners who assent, and whose parents also consent will participate. The questionnaires will be administered by myself, as well as research assistants. Each learner will be requested to complete five forms, namely a Biographical Questionnaire, the Adolescent Peer Relations Instrument, the Child's Report of Parental Behaviour Inventory and the Inventory of Parent and Peer Attachment Revised for Children. I will approximately need 90 minutes for the learners to complete these questionnaires. This may be at any time of the day that suits you, the Grade 5 and 6 learners and teachers. At no time do I wish to disrupt any classes or the learning process. All information collected will be treated in the strictest confidence. Neither the school, nor the learners will be identifiable in any of the reports written. However, learners will be given the choice of whether or not to write their names on the questionnaires if they wish to seek assistance. These names will be given to the school's field worker for follow up. Research participants may withdraw from the study at any time without any

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

penalty. The role of the school is voluntary, and you may also decide to withdraw the school's participation at any time. You will incur no additional expense by participating in the study.

Once I have received your consent to approach learners to participate in this study, I will arrange for informed assent and consent forms to be distributed to the learners, as well as to their parents. I will also arrange a time and date with your school for data collection to take place.

The information from the questionnaires, as well as the final results of this study will be disclosed to your school, which may then be utilised to prevent future bullying perpetration and victimisation.

This study has met the requirements of the Research Ethics Committee of the UFS, of which a copy of their approval letter as well as from the department of education are attached. Also attached for your information are copies of the Parent Consent Form, and the Participant Assent Form.

If you would like to participate in this research, please complete and return the attached consent form before ...

Yours sincerely,

Ms. Mariska Carter (*RESEARCHER*)

University of the Free State

School Principal Consent Form

I hereby give consent for Ms. Mariska Carter and her research assistants to approach learners in grades 5 and 6 to participate in the above psychological research study.

I have read the Invitation to school principals to participate in a research study on bullying (Project Information Statement) explaining the purpose of the research project and understand that:

- The role of the school is voluntary
- I may decide to withdraw the school's participation at any time without penalty
- Grade 5 and 6 learners will be invited to participate and that permission will be sought from them, as well as from their parents.
- Only learners who assent and whose parents consent will participate in this study.
- All information obtained will be treated in strictest confidence.
- The learners' names will not be used and individual learners will not be identifiable in any written reports about the study.
- The school will not be identifiable in any written reports about the study.
- Assistance will be provided to any learner who has voluntarily written his/her name on any of the questionnaires.
- Participants may withdraw from the study at any time without penalty.
- Feedback regarding the results of this study will be given to the school.
- I may seek further information on the project from Ms. Mariska Carter on 082 415 3448.

Name of School

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Principal Name and Surname

Principal Signature

Contact number

Date

Appendix B

Parent Informed Consent Form

The number of children who are involved in bullying indicates that it is a serious problem in our schools. Bullying may negatively affect our children's physical, as well as emotional well-being.

My name is Mariska Carter, and I am a Psychology Doctorate (Research) student at the University of the Free State (UFS). I am currently under the supervision of Dr. R. van der Watt and Prof. K.G.F. Esterhuysen. **We are trying to understand how various family factors (including the role of the primary caregiver) contribute to bullying and victimisation amongst 10-12 year old boys and girls.**

Your child may provide us with valuable information regarding these issues. Therefore we would like to involve your child in the project. Participation is totally voluntary, and your child may withdraw from the study at any time. You do not need to pay for participating in the study.

Should you agree to your child participating in this study, he/she will be required to complete **five questionnaires** on bullying and perceived parenting behaviours. **Your child does not have to write his/her name on any of these questionnaires.** However, he/she will be given the **option** of whether or not to write his/her name on the questionnaires, to provide assistance for any distress he/she might be experiencing. In such a case, his/her name will be given to a field worker for individual follow up. Please note that your child's responses on the questionnaires are confidential, and that no access can be granted without your child's permission. However, in the case of life-threatening information (e.g., suicidal thoughts), you will be immediately notified.

If you do wish for your child to participate in the study please sign this consent form. Once you have signed this consent form you may hand it back to your child's teacher and/or principal.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

The results of this research may be published in a scientific journal. However, your child's identity and personal information will remain strictly confidential. You may contact Ms. Mariska Carter or Dr. Ronél van der Watt at the university (051 401 9682) with any questions you may have regarding the research.

Kind Regards,

Ms. Mariska Carter (*RESEARCHER*)

University of the Free State

CONSENT TO PARTICIPATE IN RESEARCH

I (name and surname) parent/guardian of
..... (name of child) hereby voluntarily **agree**
for my child to participate in the abovementioned study.

Signature of Parent

Date

Name of child

Contact Number

Appendix C

Child Assent Form

Dear Learner

I am from the University of the Free State. I am doing a project at your school so that I can complete my studies, and I am inviting you to take part. It is up to you whether you would like to take part in my project or not. It doesn't matter if you don't want to.

I am doing a project about school bullying and victimisation. I also want to ask a few questions about your family life: For example, the way your parent or caregiver (that is the person who takes care of you most of the time) treats you, and the relationship between the two of you. This will allow me to help children and their families to deal with school bullying and victimisation.

If you decide that you would like to take part in my project, then I will ask you to complete five forms. You don't have to write your name on these forms, so nobody will know it is you. If you do decide to write your name on these forms, then I will give your name to a field worker. He/she will talk to you about what's bothering you. If he/she she cannot help you, then he/she will ask your parents or caregivers to help you, but only with YOUR permission.

If you get upset while answering these forms, then you can tell me. If you do not want to complete these forms, you don't have to. You may withdraw whenever you like. If you withdraw it will not be held against you.

Please write your name on the line if you want to take part in this project:

Name and Surname: _____

Date: _____

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Appendix D

Frequency Distribution of the Sample in terms of Age, Gender, Grade, and Ethnicity per school

School	District	Age						Gender				Grade				Ethnicity			
		10		11		12		Male		Female		5		6		White		Black	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
School 1	Rural	6	15.8	15	39.5	17	44.7	14	36.8	24	63.2	15	39.5	23	60.5	18	47.4	20	52.6
School 2	Rural	2	11.1	10	55.6	6	33.3	8	44.4	10	55.6	10	55.6	8	44.4	13	72.2	5	27.8
School 3	Rural	4	18.2	12	54.5	6	27.3	6	27.3	16	72.7	15	68.2	7	31.8	13	59.1	9	40.9
School 4	Urban	16	30.8	22	42.3	14	26.9	26	49.1	27	50.9	28	52.8	25	47.2	45	84.9	8	15.1
School 5	Urban	3	17.6	9	52.9	5	29.4	6	35.3	11	64.7	10	58.8	7	41.2	9	52.9	8	47.1
School 6	Rural	2	11.8	11	64.7	4	23.5	9	52.9	8	47.1	8	47.1	9	52.9	15	88.2	2	11.8
School 7	Urban	8	20.0	13	32.5	19	47.5	17	42.5	23	57.5	17	42.5	23	57.5	35	87.5	5	12.5
School 8	Rural	17	16.3	43	41.3	44	42.3	53	51.0	51	49.0	50	48.1	54	51.9	82	78.8	22	21.2
School 9	Urban	9	31.0	11	37.9	9	31.0	9	31.0	20	69.0	15	51.7	14	48.3	10	34.5	19	65.5
School 10	Urban	4	13.3	13	43.3	13	43.3	9	30.0	21	70.0	23	76.7	7	23.3	9	30.0	21	70.0
School 11	Urban	10	23.8	15	35.7	17	40.5	19	45.2	23	54.8	19	45.2	23	54.8	3	7.1	39	92.9
School 12	Urban	3	15.8	10	52.6	6	31.6	7	36.8	12	63.2	7	36.8	12	63.2	0	0.0	19	100.0
School 13	Urban	9	10.6	47	55.3	29	34.1	27	31.8	58	68.2	48	56.5	37	43.5	85	100.0	0	0.0
School 14	Urban	19	19.6	47	48.5	31	32.0	38	39.2	59	60.8	57	58.8	40	41.2	97	100.0	0	0.0
School 15	Urban	5	11.4	27	61.4	12	27.3	22	50.0	22	50.0	23	52.3	21	47.7	0	0.0	44	100.0
School 16	Urban	7	10.3	29	42.6	32	47.1	38	55.9	30	44.1	36	52.9	32	47.1	0	0.0	68	100.0

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

School	District	Age				Gender				Grade				Ethnicity					
		10		11		12		Male		Female		5		6		White		Black	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
School 17	Urban	4	6.6	31	50.8	26	42.6	27	44.3	34	55.7	34	55.7	27	44.3	0	0.0	61	100.0
School 18	Urban	4	16.7	9	37.5	11	45.8	15	62.5	9	37.5	14	58.3	10	41.7	24	100.0	0	0.0
School 19	Rural	1	6.3	4	25.0	11	68.8	2	12.5	14	87.5	6	37.5	10	62.5	8	50.0	8	50.0
School 20	Urban	8	14.5	29	52.7	18	32.7	22	40.0	33	60.0	41	74.5	14	25.5	1	1.8	54	98.2
School 21	Urban	3	17.6	9	52.9	5	29.4	5	29.4	12	70.6	11	64.7	6	35.3	0	0.0	17	100.0
School 22	Urban	2	8.0	15	60.0	8	32.0	8	32.0	17	68.0	17	68.0	8	32.0	22	88.0	3	12.0
School 23	Urban	0	0.0	16	50.0	16	50.0	12	37.5	20	62.5	9	28.1	23	71.9	0	0.0	32	100.0
School 24	Urban	7	5.6	63	50.4	55	44.0	42	33.6	83	66.4	77	61.6	48	38.4	125	100.0	0	0.0
TOTAL		153	14.1	510	47.4	414	38.4	441	40.9	637	59.1	590	54.7	488	45.3	614	57.0	464	43.0

Appendix E

Biographical Questionnaire

Please answer the following questions by **ENCIRCLING** the most appropriate response. Please note that these questions are for statistical purposes only.

1.	Grade	Grade 5	1
		Grade 6	2
2.	Age	9 years	1
		10 years	2
		11 years	3
		12 years	4
		13 years	5
		Other	6
		If other, specify	
3.	Gender	Boy	1
		Girl	2
4.	Population group	White	1
		Black	2
		Coloured	3
		Indian	4
		Asian	5
		Other	6
		If other, specify	
5.	Home language	English	1
		Sotho	2
		Other	3
		If other, specify	
6.	Where do you stay during school terms?	Home	1
		Hostel	2
		Other	3
		If other, specify	

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

7.	Who is the head of your household?	Both parents (mom and dad)	1
		Mother/stepmother	2
		Father/stepfather	3
		Both grandparents	4
		Grandmother	5
		Grandfather	6
		Sister	7
		Brother	8
		Other family member	9
		Other	10
If other, specify			
8.	What is your position in the family?	Only child	1
		Oldest child	2
		Youngest child	3
		Not any of above	4
9.	Who is your PRIMARY caregiver? (Select only one)	Mother	1
		Father	2
		Aunt	3
		Uncle	4
		Grandmother	5
		Grandfather	6
		Sister	7
		Brother	8
		Other family member	9
		Other	10
If other, specify			
10.	How many brothers and sisters do you have?		
		Number of brothers	
		Number of sisters	

Optional:

If you feel you want help with being a bully yourself or being a victim, please write your name, surname and cell number here: _____

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Appendix F

The Adolescent Peer Relations Instrument: Bully/Target (APRI-BT)

Do you have access to a cell phone? Yes / No

Do you have access to the Internet? Yes / No

SECTION 1

Since you have been at this school THIS TERM how often HAVE YOU done any of the following things to a LEARNER (or learners) at this school. CIRCLE THE NUMBER THAT IS CLOSEST TO YOUR ANSWER.

In the past term at this school I...	Never	Once or twice this term	Once or twice a month	Once a week	Several times a week	Every day
1 Teased them by saying things to them	1	2	3	4	5	6
2 Pushed or shoved a learner	1	2	3	4	5	6
3 Posted negative comments about them online/on the Internet (e.g. on Facebook or other similar site)	1	2	3	4	5	6
4 Made rude comments at a learner	1	2	3	4	5	6
5 Sent them rude/negative e-mail to them	1	2	3	4	5	6
6 Got my friends to turn against a learner	1	2	3	4	5	6
7 Made jokes about a learner	1	2	3	4	5	6
8 Crashed into a learner on purpose as they walked by	1	2	3	4	5	6
9 Sent them rude/negative phone text (SMS) message	1	2	3	4	5	6

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

	In the past term at this school I...	Never	Once or twice this term	Once or twice a month	Once a week	Several times a week	Every day
10	Picked on a learner by swearing at them	1	2	3	4	5	6
11	Told my friends things about a learner to get them into trouble	1	2	3	4	5	6
12	Picked on them online/on the Internet	1	2	3	4	5	6
13	Got into a physical fight with a learner because I didn't like them	1	2	3	4	5	6
14	Said things about their looks they didn't like	1	2	3	4	5	6
15	Got other learners to post negative comments about them online/on the Internet	1	2	3	4	5	6
16	Got other learners to start a rumour about a learner	1	2	3	4	5	6
17	Slapped or punched a learner	1	2	3	4	5	6
18	Got other learners to ignore a learner	1	2	3	4	5	6
19	Posted negative images/video of them online/on the Internet	1	2	3	4	5	6
20	Made fun of a learner by calling them names	1	2	3	4	5	6
21	Threw something at a learner to hit them	1	2	3	4	5	6
22	Threatened to physically hurt or harm a learner	1	2	3	4	5	6
23	Got your friends to send rude/negative e-mails to a learner	1	2	3	4	5	6

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

	In the past term at this school I...	Never	Once or twice this term	Once or twice a month	Once a week	Several times a week	Every day
24	Left them out of activities or games on purpose	1	2	3	4	5	6
25	Kept a learner away from me by giving them mean looks	1	2	3	4	5	6
26	Posted rude/negative comments on Internet forums about them	1	2	3	4	5	6

SECTION 2

Please indicate how often a learner (or learners) **at this school** has done the following things **TO YOU** since you have **been at this school this term**. **CIRCLE THE NUMBER THAT IS CLOSEST TO YOUR ANSWER**

	In the past term at this school, ...	Never	Once or twice this term	Once or twice a month	Once a week	Several times a week	Every day
1	I was teased by learners saying things to me	1	2	3	4	5	6
2	I was pushed or shoved	1	2	3	4	5	6
3	Negative comments were posted about me online/on the Internet (e.g., on Facebook or other similar site)	1	2	3	4	5	6
4	A learner wouldn't be friends with me because other people didn't like me	1	2	3	4	5	6
5	I was sent rude/negative e-mails	1	2	3	4	5	6
6	A learner made rude comments at me	1	2	3	4	5	6

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

	In the past term at this school I...	Never	Once or twice this term	Once or twice a month	Once a week	Several times a week	Every day
7	I was hit or kicked hard	1	2	3	4	5	6
8	A learner ignored me when they were with their friends	1	2	3	4	5	6
9	I was sent rude/negative phone text (SMS) messages	1	2	3	4	5	6
10	Jokes were made up about me	1	2	3	4	5	6
11	Learners crashed into me on purpose as they walked by	1	2	3	4	5	6
12	I was picked-on online/on the Internet	1	2	3	4	5	6
13	A learner got their friends to turn against me	1	2	3	4	5	6
14	My property was damaged on purpose	1	2	3	4	5	6
15	Learners posted negative comments about me online/on the Internet	1	2	3	4	5	6
16	Things were said about my looks I didn't like	1	2	3	4	5	6
17	I wasn't invited to a learner's place because other people didn't like me	1	2	3	4	5	6
18	I was embarrassed by learners saying things to me	1	2	3	4	5	6
19	Negative images/video of me was posted online/on the Internet	1	2	3	4	5	6
20	A learner got learners to start a rumour about me	1	2	3	4	5	6

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

	In the past term at this school I...	Never	Once or twice this term	Once or twice a month	Once a week	Several times a week	Every day
21	Something was thrown at me to hit me	1	2	3	4	5	6
22	I was threatened to be physically hurt or harmed	1	2	3	4	5	6
23	A learner got their friends to send me rude/negative e-mails	1	2	3	4	5	6
24	I was left out of activities, games on purpose	1	2	3	4	5	6
25	I was called names I didn't like	1	2	3	4	5	6
26	Rude/negative comments were posted about me on Internet forums	1	2	3	4	5	6

Appendix G

The Child's Report of Parental Behaviour Inventory 30 (CRPBI-30)

Please read each statement on the following pages and circle the answer that most closely describes the way you caregiver act toward you.

If you think the statement describes a person who is **Not Like** your caregiver, circle 1.

If you think the statement describes a person who is **Somewhat Like** your caregiver, circle 2.

If you think the statement describes a person who is **A Lot Like** your caregiver, circle 3.

MY CAREGIVER IS A PERSON WHO ...	Not Like	Somewhat Like	A Lot Like
1. makes me feel better after talking over my worries with him/her.	1	2	3
2. tells me of all the things he/she has done for me.	1	2	3
3. believes in having a lot of rules and sticking with them.	1	2	3
4. smiles at me often.	1	2	3
5. says, if I really cared for him/her, I would not do things that cause him/her to worry.	1	2	3
6. insists that I must do exactly as I am told.	1	2	3
7. is able to make me feel better when I am upset.	1	2	3
8. is always telling me how I should behave.	1	2	3
9. is very strict with me.	1	2	3
10. enjoys doing things with me.	1	2	3
11. would like to be able to tell me what to do all the time.	1	2	3
12. gives hard punishment.	1	2	3

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

MY CAREGIVER IS A PERSON WHO ...	Not Like	Somewhat Like	A Lot Like
13. cheers me up when I am sad.	1	2	3
14. wants to control whatever I do.	1	2	3
15. is easy with me.	1	2	3
16. gives me a lot of care and attention.	1	2	3
17. is always trying to change me.	1	2	3
18. lets me off easy when I do something wrong.	1	2	3
19. makes me feel like the most important person in his/her life.	1	2	3
20. only keeps rules when it suits him/her.	1	2	3
21. gives me as much freedom as I want.	1	2	3
22. believes in showing his/her love for me.	1	2	3
23. is less friendly with me, if I do not see things his/her way.	1	2	3
24. lets me go any place I please without asking.	1	2	3
25. often praises me.	1	2	3
26. will avoid looking at me when I have disappointed him/her.	1	2	3
27. lets me go out any evening I want.	1	2	3
28. is easy to talk to.	1	2	3
29. if I have hurt his/her feelings, stops talking to me until I please him/her again.	1	2	3
30. lets me do anything I like to do.	1	2	3

Appendix H

The Inventory of Parent and Peer Attachment Revised (IPPA-R) for Children

We would like to know more about your relationships with your **caregiver** (*The person who takes care of you most of the time*). Please read each question and circle the appropriate number. Please answer all the questions.

	Never True	Sometimes True	Always True
1. My caregiver respects my feelings.	1	2	3
2. My caregiver is a good caregiver.	1	2	3
3. I wish I had a different caregiver.	1	2	3
4. My caregiver accepts me as I am.	1	2	3
5. I can't depend on my caregiver to help me solve a problem.	1	2	3
6. I like to get my caregiver's view on things I'm worried about.	1	2	3
7. It does not help to show my feelings when I'm upset.	1	2	3
8. My caregiver can tell when I'm upset about something.	1	2	3
9. I feel silly or ashamed when I talk about my problems with my caregiver.	1	2	3
10. My caregiver expects too much from me.	1	2	3
11. I easily get upset at home.	1	2	3
12. I get upset a lot more than my caregiver knows about.	1	2	3
13. When I talk about things with my caregiver he/she listens to what I think.	1	2	3
14. My caregiver listens to my feelings.	1	2	3
15. My caregiver has his/her own problems, so I don't bother him/her with mine.	1	2	3
16. My caregiver helps me to understand myself better.	1	2	3

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

	Never True	Sometimes True	Always True
17. I feel angry with my caregiver.	1	2	3
18. I don't get much attention at home.	1	2	3
19. My caregiver supports me to talk about my worries.	1	2	3
20. My caregiver understands me.	1	2	3
21. I don't know who I can depend on.	1	2	3
22. When I am angry about something, my caregiver tries to understand.	1	2	3
23. I trust my caregiver.	1	2	3
24. My caregiver doesn't understand my problems.	1	2	3
25. I can count on my caregiver when I need to talk about a problem.	1	2	3
26. No one understands me.	1	2	3
27. If my caregiver knows that I am upset about something, he/she asks me about it.	1	2	3

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Appendix I

Correlation Coefficients between Bullying, Perceived Parenting Dimensions, Attachment, Gender, and Ethnicity for the Entire Sample

Variables	Physical (perp)	Physical (victim)	Verbal (perp)	Verbal (victim)	Social- relational (perp)	Social- relational (victim)	Accept	Firm control	Psych control	Attach	Gender	Ethnicity
Physical (perp)	-											
Physical (victim)	.411**	-										
Verbal (perp)	.706**	.402**	-									
Verbal (victim)	.339**	.774**	.403**	-								
Social-relational (perp)	.652**	.369**	.616**	.321**	-							
Social-relational (victim)	.255**	.697**	.218**	.726**	.325**	-						
Accept	-.158**	-.163**	-.178**	-.179**	-.148**	-.142**	-					
Firm control	.091**	.137**	.130**	.173**	.028	.144**	-.370**	-				
Psych control	.241**	.298**	.305**	.298**	.219**	.237**	-.283**	.341**	-			
Attach	-.222**	-.224**	-.271**	-.260**	-.199**	-.187**	.756**	-.334**	-.411**	-		
Gender	-.156**	-.057	-.113**	.019	.023	.100**	.005	-.020	-.118**	-.032	-	
Ethnicity	.238**	.245**	.385**	.256**	.184**	.057	-.102**	.134**	.496**	-.245**	-.005	-

Note. perp = perpetration; victim = victimisation; Accept = Acceptance; Psych control = Psychological control; Attach = Attachment.

* $p \leq .05$. ** $p \leq .01$.

References

- Achenbach, T. M. (1990). What is “developmental” about developmental psychopathology? In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 29–48) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=A1Ugc13HXFAC&printsec=frontcover&dq=Risk+and+protective+factors+in+the+development+of+psychopathology&hl=en&sa=X&ved=0ahUKEwjVktLSvM7TAhUqJ8AKHab1BWsQ6AEITAA#v=onepage&q=Risk%20and%20protective%20factors%20in%20the%20development%20of%20psychopathology&f=false>
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. N. (2014). *Patterns of attachment: A psychological study of the Strange Situation* [Google Books version]. Retrieved from <https://books.google.co.za/books?id=X6GYAgAAQBAJ&printsec=frontcover&dq=patterns+of+attachment:+a+psychological+study+of+the+strange+situation&hl=en&sa=X&ved=0ahUKEwil7Pjb1s3PAhXkLcAKHQ5NDd8Q6AEIKzAB#v=onepage&q=patterns%20of%20attachment%20a%20psychological%20s&f=false>
- Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist*, *46*(4), 333–341. doi:10.1037/0003-066X.46.4.333
- Albdour, M., & Krouse, H. J. (2014). Bullying and victimization among African American adolescents: A literature review. *Journal of Child and Adolescent Psychiatric Nursing*, *27*(2), 68–82. doi:10.1111/jcap.12066
- Albrecht, A. K., Galambos, N. L., & Jansson, S. M. (2007). Adolescents’ internalizing and aggressive behaviors and perceptions of parents’ psychological control: A panel study examining direction of effects. *Journal of Youth and Adolescence*, *36*(5), 673–684. doi:10.1007/s10964-007-9191-5
- Alderfer, M. A., Fiese, B. H., Gold, J. I., Cutuli, J. J., Holmbeck, G. N., Goldbeck, L., ... Patterson, J. (2008). Evidence-based assessment in pediatric psychology: Family measures. *Journal of Pediatric Psychology*, *33*(9), 1046–1061. doi:10.1093/jpepsy/jsm083
- Aldrich, C. A. (1947). The advisability of breast feeding. *Journal of the American Medical Association*, *135*(14), 915–916. doi: 10.1001/jama.1947.02890140035008

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Allan, A. (2015). Ethics in psychology and law: An international perspective. *Ethics & Behavior*, 25(6), 443–457. doi:10.1080/10508422.2014.952006
- Allemand, M., Steiger, A. E., & Fend, H. A. (2015). Empathy development in adolescence predicts social competencies in adulthood. *Journal of Personality*, 83(2), 229–241. doi:10.1111/jopy.12098
- Álvarez-García, D., García, T., & Núñez, J. C. (2015). Predictors of school bullying perpetration in adolescence: A systematic review. *Aggression and Violent Behavior*, 23, 126–136. doi:10.1016/j.avb.2015.05.007
- American Psychological Association. (2010). *Ethical principles of psychologists and code of conduct*. Washington, DC: Author.
- Anderson, R. J., & Branstetter, S. A. (2012). Adolescents, parents, and monitoring: A review of constructs with attention to process and theory. *Journal of Family Theory & Review*, 4(1), 1–19. doi:10.1111/j.1756-2589.2011.00112.x
- Ang, R. P., Huan, V. S., & Florell, D. (2014). Understanding the relationship between proactive and reactive aggression, and cyberbullying across United States and Singapore adolescent samples. *Journal of Interpersonal Violence*, 29(2), 237–254. doi:10.1177/0886260513505149
- Antoniadou, N., & Kokkinos, C. M. (2015). Cyber and school bullying: Same or different phenomena? *Aggression and Violent Behavior*, 25, 363–372. doi:10.1016/j.avb.2015.09.013
- Antoniadou, N., Kokkinos, C. M., & Markos, A. (2016). Possible common correlates between bullying and cyber-bullying among adolescents. *Psicología Educativa*, 22(1), 27–38. doi:10.1016/j.pse.2016.01.003
- Aricak, O. T. (2016). The relationship between mental health and bullying. In H. Cowie & C. –A. Myers (Eds.), *Bullying among university students: Cross-national perspectives* (pp. 76–90 [Google Books version]. Retrieved from [https:// books.google.co.za/books?id=r_mPCgAAQBAJ&pg=PA77&dq=is+bullying+a+disorder&hl=en&sa=X&ved=0ahUKEwjx05GS0M_WAhUnCsAKHbjkAO4Q6AEIPDAE#v=onepage&q=is%20bullying%20a%20disorder&f=false](https://books.google.co.za/books?id=r_mPCgAAQBAJ&pg=PA77&dq=is+bullying+a+disorder&hl=en&sa=X&ved=0ahUKEwjx05GS0M_WAhUnCsAKHbjkAO4Q6AEIPDAE#v=onepage&q=is%20bullying%20a%20disorder&f=false)

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Armsden, G. C., & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, *16*(5), 427–454. doi:10.1007/BF02202939
- Arslan, S., Hallett, V., Akkas, E., & Akkas, O. A. (2012). Bullying and victimization among Turkish children and adolescents: Examining prevalence and associated health symptoms. *European Journal of Pediatrics*, *171*(10), 1549–1557. doi:10.1007/s00431-012-1782-9
- Atik, G., & Güneri, O. Y. (2013). Bullying and victimization: Predictive role of individual, parental, and academic factors. *School Psychology International*, *34*(6), 658–673. doi:10.1177/0143034313479699
- Aunola, K., & Nurmi, J.-E. (2005). The role of parenting styles in children's problem behavior. *Child Development*, *76*(6), 1144–1159. doi:10.1111/j.1467-8624.2005.00840.x-i1
- Azeredo, C. M., Rinaldi, A. E. M., De Moraes, C. L., Levy, R. B., & Menezes, P. R. (2015). School bullying: A systematic review of contextual-level risk factors in observational studies. *Aggression and Violent Behavior*, *22*, 65–76. doi:10.1016/j.avb.2015.04.006
- Baldry, A. C., & Farrington, D. P. (2005). Protective factors as moderators of risk factors in adolescence bullying. *Social Psychology of Education*, *8*(3), 263–284. doi:10.1007/s11218-005-5866-5
- Baldwin, A. L. (1948). Socialization and the parent-child relationship. *Child Development*, *19*(3), 127–136. doi:10.2307/1125710
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, *3*(3), 193–209. doi:10.1207/s15327957pspr0303_3
- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, *67*(6), 3296–3319. doi:10.2307/1131780

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Barber, B. K., Stolz, H. E., Olsen, J. A., Collins, W. A., & Burchinal, M. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development*, *70*(4), 1–147. doi:10.1111/j.1540-5834.2005.00365.x
- Barboza, G. E. (2015). The association between school exclusion, delinquency and subtypes of cyber- and F2F-victimizations: Identifying and predicting risk profiles and subtypes using latent class analysis. *Child Abuse & Neglect*, *39*, 109–122. doi:10.1016/j.chiabu.2014.08.007
- Barlett, C., & Coyne, S. M. (2014). A meta-analysis of sex differences in cyber-bullying behavior: The moderating role of age. *Aggressive Behavior*, *40*(5), 474–488. doi:10.1002/ab.21555
- Barlett, C. P., Gentile, D. A., & Chew, C. (2016). Predicting cyberbullying from anonymity. *Psychology of Popular Media Culture*, *5*(2), 171–180. doi:10.1037/ppm0000055
- Barnett, M. A., & Scaramella, L. V. (2013). Mothers' parenting and child sex differences in behavior problems among African American preschoolers. *Journal of Family Psychology*, *27*(5), 773–783. doi:10.1037/a0033792
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. doi:10.1037/0022-3514.51.6.1173
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*(2), 226–244. doi:10.1037/0022-3514.61.2.226
- Batanova, M. D., & Loukas, A. (2014). Maternal psychological control and peer victimization in early adolescence: An application of the family relational schema model. *The Journal of Early Adolescence*, *34*(2), 206–228. doi:10.1177/0272431613483005
- Bauman, S. (2010). Cyberbullying in a rural intermediate school: An exploratory study. *The Journal of Early Adolescence*, *30*(6), 803–833. doi:10.1177/0272431609350927

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Bauman, S., & Bellmore, A. (2015). New directions in cyberbullying research. *Journal of School Violence, 14*(1), 1–10. doi:10.1080/15388220.2014.968281
- Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child Development, 37*(4), 887–907. doi:10.2307/1126611
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs, 75*(1), 43–88. Retrieved from <https://www.ncbi.nlm.nih.gov/labs/journals/genet-psychol-monogr/>
- Bayraktar, F. (2012). Bullying among adolescents in North Cyprus and Turkey: Testing a multifactor model. *Journal of Interpersonal Violence, 27*(6), 1040–1065. doi:10.1177/0886260511424502
- Bayraktar, F., Machackova, H., Dedkova, L., Cerna, A., & Ševčíková, A. (2015). Cyberbullying: The discriminant factors among cyberbullies, cyberbullies, and cyberbully-victims in a Czech adolescent sample. *Journal of Interpersonal Violence, 30*(18), 3192–3216. doi:10.1177/0886260514555006
- Bean, R. A., Barber, B. K., & Crane, D. R. (2006). Parental support, behavioral control, and psychological control among African American youth: The relationships to academic grades, delinquency, and depression. *Journal of Family Issues, 27*(10), 1335–1355. doi:10.1177/0192513X06289649
- Beckman, L., Hagquist, C., & Hellström, L. (2013). Discrepant gender patterns for cyberbullying and traditional bullying – An analysis of Swedish adolescent data. *Computers in Human Behavior, 29*(5), 1896–1903. doi:10.1016/j.chb.2013.03.010
- Beijersbergen, M. D., Juffer, F., Bakermans-Kranenburg, M. J., & Van Ijzendoorn, M. H. (2012). Remaining or becoming secure: Parental sensitive support predicts attachment continuity from infancy to adolescence in a longitudinal adoption study. *Developmental Psychology, 48*(5), 1277–1282. doi: 10.1037/a0027442
- Belsey, B. (2006). *Cyberbullying: An emerging threat to the “always on” generation*. Retrieved from <https://pdfs.semanticscholar.org/d4b9/5d4ad8599e86cd726290f4e4a5d8309f6bda.pdf>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Benson, M. J., McWey, L. M., & Ross, J. J. (2006). Parental attachment and peer relations in adolescence: A meta-analysis. *Research in Human Development, 3*(1), 33–43. doi:10.1207/s15427617rhd0301_4
- Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. New York, NY: McGraw-Hill.
- Bettencourt, A., Farrell, A., Liu, W., & Sullivan, T. (2013). Stability and change in patterns of peer victimization and aggression during adolescence. *Journal of Clinical Child & Adolescent Psychology, 42*(4), 429–441. doi:10.1080/15374416.2012.738455
- Bhana, A. (2010). Middle childhood and pre-adolescence. In I. Petersen, A. Bhana, A. J. Flisher, L. Swartz, & L. Richter (Eds.), *Promoting mental health in scarce-resource contexts: Emerging evidence and practice* (pp. 124–142). Cape Town: Human Sciences Research Council.
- Bibou-Nakou, I., Tsiantis, J., Assimopoulos, H., & Chatzilambou, P. (2013). Bullying/victimization from a family perspective: A qualitative study of secondary school students' views. *European Journal of Psychology of Education, 28*(1), 53–71. doi:10.1007/s10212-011-0101-6
- Biggs, B. K., Vernberg, E., Little, T. D., Dill, E. J., Fonagy, P., & Twemlow, S. W. (2010). Peer victimization trajectories and their association with children's affect in late elementary school. *International Journal of Behavioral Development, 34*(2), 136–146. doi:10.1177/0165025409348560
- Blakemore, S.-J. (2012). Imaging brain development: The adolescent brain. *NeuroImage, 61*(2), 397–406. doi: 10.1016/j.neuroimage.2011.11.080
- Boel-Studt, S., & Renner, L. M. (2013). Individual and familial risk and protective correlates of physical and psychological peer victimization. *Child Abuse & Neglect, 37*(12), 1163–1174. doi:10.1016/j.chiabu.2013.07.010
- Booth-LaForce, C., Groh, A. M., Burchinal, M. R., Roisman, G. I., Owen, M. T., & Cox, M. J. (2014). Caregiving and contextual sources of continuity and change in attachment security from infancy to late adolescence. *Monographs of the Society for Research in Child Development, 79*(3), 67–84. doi:10.1111/mono.12114

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Booth, C. L., Rose-Krasnor, L., McKinnon, J.-A., & Rubin, K. H. (1994). Predicting social adjustment in middle childhood: The role of preschool attachment security and maternal style. *Social Development, 3*(3), 189–204.
- Borelli, J. L., David, D. H., Crowley, M. J., & Mayes, L. C. (2010). Links between disorganized attachment classification and clinical symptoms in school-aged children. *Journal of Child and Family Studies, 19*(3), 243–256. doi:10.1007/s10826-009-9292-8
- Borelli, J. L., Somers, J., West, J. L., Coffey, J. K., De Los Reyes, A., & Shmueli-Goetz, Y. (2016). Associations between attachment narratives and self-report measures of attachment in middle childhood: Extending evidence for the validity of the Child Attachment Interview. *Journal of Child and Family Studies, 25*(4), 1235–1246. doi:10.1007/s10826-015-0310-8
- Bosmans, G. (2016). Cognitive behaviour therapy for children and adolescents: Can attachment theory contribute to its efficacy? *Clinical Child and Family Psychology Review, 19*(4), 310–328. doi:10.1007/s10567-016-0212-3
- Bosmans, G., Braet, C., Heylen, J., & De Raedt, R. (2015). Children's attentional processing of mother and proximity seeking. *PLOS ONE, 10*(4), 1–20. doi:10.1371/journal.pone.0124038
- Bosmans, G., Braet, C., Van Leeuwen, K., & Beyers, W. (2006). Do parenting behaviors predict externalizing behavior in adolescence, or is attachment the neglected 3rd factor? *Journal of Youth and Adolescence, 35*(3), 354–364. doi:10.1007/s10964-005-9026-1
- Bosmans, G., & Kerns, K. A. (2015). Attachment in middle childhood: Progress and prospects. *New Directions for Child and Adolescent Development, 2015*(148), 1–14. doi:10.1002/cad.20100
- Bowes, L., Maughan, B., Ball, H., Shakoor, S., Ouellet-Morin, I., Caspi, A., ... Arseneault, L. (2013). Chronic bullying victimization across school transitions: The role of genetic and environmental influences. *Development and Psychopathology, 25*(2), 333–346. doi:10.1017/S0954579412001095
- Bowes, L., Maughan, B., Caspi, A., Moffitt, T. E., & Arseneault, L. (2010). Families promote emotional and behavioural resilience to bullying: Evidence of an environmental effect.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

Journal of Child Psychology and Psychiatry, 51(7), 809–817. doi:10.1111/j.1469-7610.2010.02216.x

- Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psycho-Analysis*, 39(5), 350–373.
- Bowlby, J. (1969). *Attachment and loss, Volume 1: Attachment* (2nd ed.) [Adobe Digital Editions version]. Retrieved from <http://www.abebe.org.br/wp-content/uploads/John-Bowlby-Attachment-Second-Edition-Attachment-and-Loss-Series-Vol-1-1983.pdf>
- Bowlby, J. (1973). *Attachment and loss, Volume 2: Separation anxiety and anger* [Adobe Digital Editions version]. Retrieved from <http://www.abebe.org.br/wp-content/uploads/John-Bowlby-Separation-Anxiety-And-Anger-Attachment-and-Loss-Vol-2-1976.pdf>
- Bowlby, J. (1980). *Attachment and loss, Volume 3: Loss, sadness and depression* [Adobe Digital Editions version]. Retrieved from <http://www.abebe.org.br/wp-content/uploads/John-Bowlby-Loss-Sadness-And-Depression-Attachment-and-Loss-1982.pdf>
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development* [Adobe Digital Editions version]. Retrieved from <http://www.abebe.org.br/wp-content/uploads/John-Bowlby-A-Secure-Base-Parent-Child-Attachment-and-Healthy-Human-Development-1990.pdf>
- Boyes, M. E., Bowes, L., Cluver, L. D., Ward, C. L., & Badcock, N. A. (2014). Bullying victimisation, internalising symptoms, and conduct problems in South African children and adolescents: A longitudinal investigation. *Journal of Abnormal Child Psychology*, 42(8), 1313–1324. doi:10.1007/s10802-014-9888-3
- Bradshaw, C. P., Waasdorp, T. E., & Johnson, S. L. (2015). Overlapping verbal, relational, physical, and electronic forms of bullying in adolescence: Influence of school context. *Journal of Clinical Child & Adolescent Psychology*, 44(3), 494–508. doi:10.1080/15374416.2014.893516

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Breinholst, S., Esbjørn, B. H., & Reinholdt-Dunne, M. L. (2015). Effects of attachment and rearing behavior on anxiety in normal developing youth: A mediational study. *Personality and Individual Differences, 81*, 155–161. doi:10.1016/j.paid.2014.08.022
- Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology, 28*(5), 759–775. doi:10.1037/0012-1649.28.5.759
- Brown, S. (2012). *Measures of shape: Skewness and kurtosis*. Retrieved from <http://brownmath.com/stat/shape.htm>
- Brown, S. A., Arnold, D. H., Dobbs, J., & Doctoroff, G. L. (2007). Parenting predictors of relational aggression among Puerto Rican and European American school-age children. *Early Childhood Research Quarterly, 22*(1), 147–159. doi:10.1016/j.ecresq.2006.11.002
- Brumariu, L. E. (2015). Parent-child attachment and emotion regulation. *New Directions for Child and Adolescent Development, 2015*(148), 31–45. doi:10.1002/cad.20098
- Buelga, S., Martínez-Ferrer, B., & Musitu, G. (2015). Family relationships and cyberbullying. In R. Navarro, S. Yubero, & E. Larrañaga (Eds.), *Cyberbullying across the globe: Gender, family, and mental health* (pp. 99–116). doi:10.1007/978-3-319-25552-1
- Burk, L. R., Armstrong, J. M., Park, J.-H., Zahn-Waxler, C., Klein, M. H., & Essex, M. J. (2011). Stability of early identified aggressive victim status in elementary school and associations with later mental health problems and functional impairments. *Journal of Abnormal Child Psychology, 39*(2), 225–238. doi:10.1007/s10802-010-9454-6
- Burton, K. A., Florell, D., & Gore, J. S. (2013). Differences in proactive and reactive aggression in traditional bullies and cyberbullies. *Journal of Aggression, Maltreatment & Trauma, 22*(3), 316–328. doi:10.1080/10926771.2013.743938
- Burton, P. & Leoschut, L. (2013). *School violence in South Africa. Monograph Series, No. 12*. Cape Town: Centre for Justice and Crime Prevention.
- Burton, P. & Mutongwizo, T. (2009). *Inescapable violence: Cyber bullying and electronic violence against young people in South Africa. CJCP Issue Paper No. 8*. Claremont: Centre for Justice and Crime Prevention.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Busch, V., Laninga-Wijnen, L., Van Yperen, T. A., Schrijvers, A. J. P., & De Leeuw, J. R. J. (2015). Bidirectional longitudinal associations of perpetration and victimization of peer bullying with psychosocial problems in adolescents: A cross-lagged panel study. *School Psychology International, 36*(5), 532–549. doi:10.1177/0143034315604018
- Buschgens, C. J. M., Van Aken, M. A. G., Swinkels, S. H. N., Ormel, J., Verhulst, F. C., & Buitelaar, J. K. (2010). Externalizing behaviors in preadolescents: Familial risk to externalizing behaviors and perceived parenting styles. *European Child & Adolescent Psychiatry, 19*(7), 567–575. doi:10.1007/s00787-009-0086-8
- Cai, M., Hardy, S. A., Olsen, J. A., Nelson, D. A., & Yamawaki, N. (2013). Adolescent-parent attachment as a mediator of relations between parenting and adolescent social behavior and wellbeing in China. *International Journal of Psychology, 48*(6), 1185–1190. doi:10.1080/00207594.2013.774091
- Calafat, A., García, F., Juan, M., Becoña, E., & Fernández-Hermida, J. R. (2014). Which parenting style is more protective against adolescent substance use? Evidence within the European context. *Drug and Alcohol Dependence, 138*(1), 185–192. doi:10.1016/j.drugalcdep.2014.02.705
- Callaghan, M., Kelly, C., & Molcho, M. (2014). Exploring traditional and cyberbullying among Irish adolescents. *International Journal of Public Health, 60*(2), 199–206. doi:10.1007/s00038-014-0638-7
- Camodeca, M., & Goossens, F. A. (2005). Aggression, social cognitions, anger and sadness in bullies and victims. *Journal of Child Psychology and Psychiatry, 46*(2), 186–197. doi:10.1111/j.1469-7610.2004.00347.x
- Camodeca, M., Goossens, F. A., Schuengel, C., & Terwogt, M. M. (2003). Links between social information processing in middle childhood and involvement in bullying. *Aggressive Behavior, 29*(2), 116–127. doi:10.1002/ab.10043
- Camodeca, M., & Taraschi, E. (2015). Like father, like son? The link between parents' moral disengagement and children's externalizing behaviors. *Merrill-Palmer Quarterly, 61*(1), 173–191. doi:10.13110/merrpalmquar1982.61.1.0173

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Caravita, S. C. S., Sijtsema, J. J., Rambaran, J. A., & Gini, G. (2014). Peer influences on moral disengagement in late childhood and early adolescence. *Journal of Youth and Adolescence*, *43*(2), 193–207. doi:10.1007/s10964-013-9953-1
- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, *79*(5), 1185–1229. doi:10.1111/j.1467-8624.2008.01184.x
- Carrega, C., & Greene, L. (2017, January 26). Exclusive: Family of boy who hanged himself sues Brooklyn Catholic school for ignoring bullying. *New York Daily News*. Retrieved from <http://www.nydailynews.com/new-york/brooklyn/family-boy-bullied-suicide-sues-brooklyn-school-abuse-article-1.2955857>
- Carter, A. S., Marakovitz, S. E., & Sparrow, S. S. (2006). Comprehensive psychological assessment: A developmental psychopathology approach for clinical and applied research. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (2nd ed., Vol. 1, pp. 181–210) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=kNQA8r5zcVcC&printsec=frontcover&dq=Developmental+psychopathology:+Theory+and+method&hl=en&sa=X&ved=0ahUKEwiGh8qCzqbUAhXKJsAKHVovD1wQ6AEIIDA#v=onepage&q=Developmental%20psychopathology%3A%20Theory%20and%20method&f=false>
- Carter, J. M., & Wilson, F. L. (2015). Cyberbullying: A 21st century health care phenomenon. *Pediatric Nursing*, *41*(3), 115–125. Retrieved from <http://www.pediatricnursing.net/index.html>
- Casas, J. A., Del Rey, R., & Ortega-Ruiz, R. (2013). Bullying and cyberbullying: Convergent and divergent predictor variables. *Computers in Human Behavior*, *29*(3), 580–587. doi:10.1016/j.chb.2012.11.015
- Casas, J. F., Weigel, S. M., Crick, N. R., Ostrov, J. M., Woods, K. E., Jansen Yeh, E. A., & Huddleston-Casas, C. A. (2006). Early parenting and children's relational and physical aggression in the preschool and home contexts. *Journal of Applied Developmental Psychology*, *27*(3), 209–227. doi:10.1016/j.appdev.2006.02.003

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Cascardi, M., Brown, C., Iannarone, M., & Cardona, N. (2014). The problem with overly broad definitions of bullying: Implications for the schoolhouse, the statehouse, and the Ivory Tower. *Journal of School Violence, 13*(3), 253–276. doi:10.1080/15388220.2013.846861
- Casper, D. M., Meter, D. J., & Card, N. A. (2015). Addressing measurement issues related to bullying involvement. *School Psychology Review, 44*(4), 353–371. Retrieved from <http://naspjournals.org/loi/spsr>
- Cassidy, T. (2009). Bullying and victimisation in school children: The role of social identity, problem-solving style, and family and school context. *Social Psychology of Education, 12*(1), 63–76. doi:10.1007/s11218-008-9066-y
- Cassidy, T., & Taylor, L. (2005). Coping and psychological distress as a function of the bully victim dichotomy in older children. *Social Psychology of Education, 8*(3), 249–262. doi:10.1007/s11218-005-3021-y
- Cassidy, W., Brown, K., & Jackson, M. (2012). “Making kind cool”: Parents’ suggestions for preventing cyber bullying and fostering cyber kindness. *Journal of Educational Computing Research, 46*(4), 415–436. doi:10.2190/EC.46.4.f
- Čavojová, V., Belovičová, Z., & Sirota, M. (2011). Mindreading and empathy as predictors of prosocial behavior. *Studia Psychologica, 53*(4), 351–362. Retrieved from <http://www.studiapsychologica.com/>
- Cerezo, F., & Ato, M. (2010). Social status, gender, classroom climate and bullying among adolescents pupils. *Anales de Psicología, 26*(1), 137–144. Retrieved from <http://revistas.um.es/analesps/>
- Chao, R. K. (1995). Chinese and European American cultural models of the self reflected in mothers’ childrearing beliefs. *Ethos, 23*(3), 328–354. doi:10.1525/eth.1995.23.3.02a00030
- Chao, R. K., & Aque, C. (2009). Interpretations of parental control by Asian immigrant and European American youth. *Journal of Family Psychology, 23*(3), 342–354. doi:10.1037/a0015828

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Chao, R., & Kanatsu, A. (2008). Beyond socioeconomics: Explaining ethnic group differences in parenting through cultural and immigration processes. *Applied Developmental Science, 12*(4), 181–187. doi:10.1080/10888690802388102
- Chaux, E., & Castellanos, M. (2014). Money and age in schools: Bullying and power imbalances. *Aggressive Behavior, 41*(3), 280–293. doi:10.1002/ab.21558
- Chaux, E., Molano, A., & Podlesky, P. (2009). Socio-economic, socio-political and socio-emotional variables explaining school bullying: A country-wide multilevel analysis. *Aggressive Behavior, 35*(6), 520–529. doi:10.1002/ab.20320
- Chester, K. L., Callaghan, M., Cosma, A., Donnelly, P., Craig, W., Walsh, S., & Molcho, M. (2015). Cross-national time trends in bullying victimization in 33 countries among children aged 11, 13 and 15 from 2002 to 2010. *European Journal of Public Health, 25*(Supplement 2), 61–64. doi:10.1093/eurpub/ckv029
- Chetty, A. (2017, January 13). Bullies force pupil, 15, to quit school. *Herald Live*. Retrieved from <http://www.heraldive.co.za/news/2017/01/13/bullies-force-pupil-15-quit-school/>
- Chua, S. V., & De la Cerna, K. J. (2014). The psychological anatomy of gossip. *American Journal of Management, 14*(2004), 64–69.
- Cicchetti, D. (1990). A historical perspective on the discipline of developmental psychopathology. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 2–28) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=A1Ugc13HXFAC&printsec=frontcover&dq=Risk+and+protective+factors+in+the+development+of+psychopathology&hl=en&sa=X&ved=0ahUKEwjVktLSvM7TAhUqJ8AKHablBWsq6AEIITAA#v=onepage&q=Risk%20and%20protective%20factors%20in%20the%20development%20of%20psychopathology&f=false>
- Cicchetti, D. (2006). Development and psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (2nd ed., Vol. 1, pp. 1–23) [Google Books version]. Retrieved from https://books.google.co.za/books?id=kNQA8r5zcVcC&printsec=frontcover&dq=Developmental+psychopathology:+Theory+and+method&hl=en&sa=X&ved=0ahUKEwj_p8_P187TAhVLAcAKHYeUB9kQ6AEIJTA

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

A#v=onepage&q=Developmental%20psychopathology%3A%20Theory%20and%20method&f=false

- Claes, L., Luyckx, K., Baetens, I., Van de Ven, M., & Witteman, C. (2015). Bullying and victimization, depressive mood, and non-suicidal self-injury in adolescents: The moderating role of parental support. *Journal of Child and Family Studies*, *24*(11), 3363–3371. doi:10.1007/s10826-015-0138-2
- Cluver, L., Bowes, L., & Gardner, F. (2010). Risk and protective factors for bullying victimization among AIDS-affected and vulnerable children in South Africa. *Child Abuse & Neglect*, *34*(10), 793–803. doi:10.1016/j.chiabu.2010.04.002
- Coertze, S., & Bezuidenhout, C. (2013). The perceptions of youths in early adolescence concerning the role obesity plays in bullying. *Child Abuse Research in South Africa*, *14*(1), 67–81. Retrieved from <http://www.sapsac.co.za/carsa.html>
- Colby, A., Kohlberg, L., Speicher, B., Hewer, A., Candee, D., Gibbs, J., & Power, C. (1987). *The measurement of moral judgment, Volume 1: Theoretical foundations and research validation* [Google Books version]. Retrieved from <https://books.google.co.za/books?id=YUhdVqLr5YMC&printsec=frontcover&dq=kohlberg&hl=en&sa=X&ved=0ahUKEwjz0LOp-NzRAhXoLcAKHXqBCckQ6AEIJjAB#v=onepage&q=conventional&f=false>
- Coleman, P. K. (2003). Perceptions of parent-child attachment, social self-efficacy, and peer relationships in middle childhood. *Infant and Child Development*, *12*(4), 351–368. doi:10.1002/icd.316
- Connell, N. M., El Sayed, S., Reingle Gonzalez, J. M., & Schell-Busey, N. M. (2015). The intersection of perceptions and experiences of bullying by race and ethnicity among middle school students in the United States. *Deviant Behavior*, *36*(10), 807–822. doi:10.1080/01639625.2014.977159
- Connell, N. M., Schell-Busey, N. M., Pearce, A. N., & Negro, P. (2013). Badgrlz? Exploring sex differences in cyberbullying behaviors. *Youth Violence and Juvenile Justice*, *12*(3), 209–228. doi:10.1177/1541204013503889

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly, 25*(2), 65–83. doi:10.1037/a0020149
- Copeland, W. E., Wolke, D., Angold, A., & Costello, E. J. (2013). Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *Journal of the American Medical Association Psychiatry, 70*(4), 419–426. doi:10.1001/jamapsychiatry.2013.504
- Cowan, P. A., & Cowan, C. P. (2007). Attachment theory: Seven unresolved issues and questions for future research. *Research in Human Development, 4*(3–4), 181–201. doi:10.1080/15427600701663007
- Craig, W., Pepler, D., & Blais, J. (2007). Responding to bullying: What works? *School Psychology International, 28*(4), 465–477. doi:10.1177/0143034307084136
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*(1), 74–101. doi:10.1037/0033-2909.115.1.74
- Crick, N. R., & Dodge, K. A. (1999). "Superiority" is in the eye of the beholder: A comment on Sutton, Smith, and Swettenham. *Social Development, 8*(1), 128–131. doi:10.1111/1467-9507.00084
- Crick, N. R., & Zahn-Waxler, C. (2003). The development of psychopathology in females and males: Current progress and future challenges. *Development and Psychopathology, 15*(3), 719–742. Retrieved from <https://www.cambridge.org/core/journals/development-and-psychopathology>
- Cross, D., Lester, L., & Barnes, A. (2015). A longitudinal study of the social and emotional predictors and consequences of cyber and traditional bullying victimisation. *International Journal of Public Health, 60*(2), 207–217. doi:10.1007/s00038-015-0655-1
- Crowell, J. A., Fraley, R. C., & Shaver, P. R. (1999). Measurement of individual differences in adolescent and adult attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 434–468) [Google Books

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

version]. Retrieved from <https://books.google.co.za/books?id=haEfq-nKqjgC&printsec=frontcover&dq=Handbook+of+attachment:+Theory,+research,+and+clinical+applications&hl=en&sa=X&ved=0ahUKEwi-obOJu6HUAhUhDMAKHUaZA6UQ6AEILTAC#v=onepage&q=self-report&f=false>

- Cuadrado-Gordillo, I. (2012). Repetition, power imbalance, and intentionality: Do these criteria conform to teenagers' perception of bullying? A role-based analysis. *Journal of Interpersonal Violence, 27*(10), 1889–1910. doi:10.1177/0886260511431436
- Curtner-Smith, M. E., Culp, A. M., Culp, R., Scheib, C., Owen, K., Tilley, A., ... Coleman, P. W. (2006). Mothers' parenting and young economically disadvantaged children's relational and overt bullying. *Journal of Child and Family Studies, 15*(2), 177–189. doi:10.1007/s10826-005-9016-7
- Cyr, M., Pasalich, D. S., McMahon, R. J., & Spieker, S. J. (2014). The longitudinal link between parenting and child aggression: The moderating effect of attachment security. *Child Psychiatry & Human Development, 45*(5), 555–564. doi:10.1007/s10578-013-0424-4
- Dane, A., Kennedy, R., Spring, M., Volk, A., & Marini, Z. (2012). Adolescent beliefs about antisocial behavior: Mediators and moderators of links with parental monitoring and attachment. *International Journal of Emotional Education, 4*(2), 4–26. Retrieved from <https://www.um.edu.mt/ijee>
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*(3), 487–496. doi:10.1037/0033-2909.113.3.487
- Darwish, A.-F. E., & Huber, G. L. (2003). Individualism vs. collectivism in different cultures: A cross-cultural study. *Intercultural Education, 14*(1), 47–56. doi:10.1080/1467598032000044647
- Debbané, M., Salaminios, G., Luyten, P., Badoud, D., Armando, M., Tozzi, A. S ... Brent, B. K. (2016). Attachment, neurobiology, and mentalizing along the psychosis continuum. *Frontiers in Human Neuroscience, 10*(406), 1–22. doi: 10.3389/fnhum.2016.00406

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- De Goede, I. H. A., Branje, S. J. T., Delsing, M. J. M. H., & Meeus, W. H. J. (2009). Linkages over time between adolescents' relationships with parents and friends. *Journal of Youth and Adolescence*, 38(10), 1304–1315. doi:10.1007/s10964-009-9403-2
- De Muth, J. E. (2014). *Basic statistics and pharmaceutical statistical applications* (3rd ed.) [Google Books version]. Retrieved from [https://books.google.co.za/books?id=yXnSBQAAQBAJ&pg=PA271&dq=reasons+for+testing+interaction+effects&hl=en&sa=X&ved=0ahUKEwi9zuquwu_TRAhUCJ8AKHaMkD7AQ6AEIKzAD#v=onepage&q=reasons for testing interaction effects&f=false](https://books.google.co.za/books?id=yXnSBQAAQBAJ&pg=PA271&dq=reasons+for+testing+interaction+effects&hl=en&sa=X&ved=0ahUKEwi9zuquwu_TRAhUCJ8AKHaMkD7AQ6AEIKzAD#v=onepage&q=reasons+for+testing+interaction+effects&f=false)
- DeNavas-Walt, C., & Proctor, B. D. (2015). *Income and poverty in the United States: 2014. Current Population Reports* (pp. 60–256). US Census Bureau. Washington, DC: US Government Printing Office.
- De Vries, S. L. A., Hovee, M., Stams, G. J. J. M., & Asscher, J. J. (2016). Adolescent-parent attachment and externalizing behavior: The mediating role of individual and social factors. *Journal of Abnormal Child Psychology*, 44(2), 283–294. doi:10.1007/s10802-015-9999-5
- Del Giudice, M. (2009). Sex, attachment, and the development of reproductive strategies. *Behavioral and Brain Sciences*, 32(1), 1–21. doi:10.1017/S0140525X09000016
- Del Rey, R., Elipe, P., & Ortega-Ruiz, R. (2012). Bullying and cyberbullying: Overlapping and predictive value of the co-occurrence. *Psicothema*, 24(4), 608–13. Retrieved from <http://www.psicothema.com/>
- Demant, J., & Van Houtte, M. (2012). The Impact of bullying and victimization on students' relationships. *American Journal of Health Education*, 43(2), 104–113. doi:10.1080/19325037.2012.10599225
- Deniz, M. (2015). A study on primary school students' being cyber bully and victim based on gender, grade, and socioeconomic status. *Croatian Journal of Education*, 17(3), 659–671. doi:10.15516/cje.v17i3.835
- De Wet, C. (2005a). The nature and extent of bullying in Free State secondary schools. *South African Journal of Education*, 25(2), 82–88. Retrieved from <http://0-journals.co.za.wagtail.ufs.ac.za/>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- De Wet, C. (2005b). The voices of victims and witnesses of bullying at school. *Koers - Bulletin for Christian Scholarship*, 70(4), 705–725. doi:10.4102/koers.v70i4.289
- Dexter, C. A., Wong, K., Stacks, A. M., Beeghly, M., & Barnett, D. (2013). Parenting and attachment among low-income African American and Caucasian preschoolers. *Journal of Family Psychology*, 27(4), 629–638. doi:10.1037/a0033341
- Diamond, L. M., Fagundes, C. P., & Butterworth, M. R. (2012). Attachment style, vagal tone, and empathy during mother–adolescent interactions. *Journal of Research on Adolescence*, 22(1), 165–184. doi: 10.1111/j.1532-7795.2011.00762.x
- Di Maggio, R., & Zappulla, C. (2014). Mothering, fathering, and Italian adolescents’ problem behaviors and life satisfaction: Dimensional and typological approach. *Journal of Child and Family Studies*, 23(3), 567–580. doi:10.1007/s10826-013-9721-6
- Dodge, K. A., & Coie, J. D. (1987). Social-information-processing factors in reactive and proactive aggression in children’s peer groups. *Journal of Personality and Social Psychology*, 53(6), 1146–1158. doi:10.1037/0022-3514.53.6.1146
- Dooley, J. J., Pyżalski, J., & Cross, D. (2009). Cyberbullying versus face-to-face bullying: A theoretical and conceptual review. *Journal of Psychology*, 217(4), 182–188. doi:10.1027/0044-3409.217.4.182
- Doyle, A. B., Lawford, H., & Markiewicz, D. (2009). Attachment style with mother, father, best friend, and romantic partner during adolescence. *Journal of Research on Adolescence*, 19(4), 690–714. doi:10.1111/j.1532-7795.2009.00617.x
- Doyle, A. B., & Markiewicz, D. (2005). Parenting, marital conflict and adjustment from early- to mid-adolescence: Mediated by adolescent attachment style? *Journal of Youth and Adolescence*, 34(2), 97–110. doi:10.1007/s10964-005-3209-7
- Drabick, D. A. G., & Kendall, P. C. (2010). Developmental psychopathology and the diagnosis of mental health problems among youth. *Clinical Psychology: Science and Practice*, 17(4), 272–280. doi:10.1111/j.1468-2850.2010.01219.x

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Dredge, R., Gleeson, J., & De la Piedad Garcia, X. (2014). Cyberbullying in social networking sites: An adolescent victim's perspective. *Computers in Human Behavior*, 36, 13–20. doi:10.1016/j.chb.2014.03.026
- Du Toit, S. H. C., & Stumpf, R. H. (1982). *Riglyne by die ontleding van omvangryke datastelle*. Pretoria: Human Sciences Research Council.
- Dykas, M. J., & Cassidy, J. (2007). Attachment and the processing of social information in adolescence. *New Directions for Child and Adolescent Development*, 2007(117), 41–56. doi:10.1002/cd.193
- Dykas, M. J., & Cassidy, J. (2011). Attachment and the processing of social information across the life span: Theory and evidence. *Psychological Bulletin*, 137(1), 19–46. doi:10.1037/a0021367
- Eastin, M. S., Greenberg, B. S., & Hofschire, L. (2006). Parenting the Internet. *Journal of Communication*, 56(3), 486–504. doi:10.1111/j.1460-2466.2006.00297.x
- Eaton, L., & Louw, J. (2000). Culture and self in South Africa: Individualism-collectivism predictions. *The Journal of Social Psychology*, 140(2), 210–217. doi:10.1080/00224540009600461
- Eichelsheim, V. I., Buist, K. L., Deković, M., Wissink, I. B., Frijns, T., Van Lier, P. A. C., ... Meeus, W. H. J. (2010). Associations among the parent-adolescent relationship, aggression and delinquency in different ethnic groups: A replication across two Dutch samples. *Social Psychiatry and Psychiatric Epidemiology*, 45(3), 293–300. doi:10.1007/s00127-009-0071-z
- Eliot, M., & Cornell, D. G. (2009). Bullying in middle school as a function of insecure attachment and aggressive attitudes. *School Psychology International*, 30(2), 201–214. doi:10.1177/0143034309104148
- Elledge, L. C., Williford, A., Boulton, A. J., DePaolis, K. J., Little, T. D., & Salmivalli, C. (2013). Individual and contextual predictors of cyberbullying: The influence of children's provictim attitudes and teachers' ability to intervene. *Journal of Youth and Adolescence*, 42(5), 698–710. doi:10.1007/s10964-013-9920-x

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Ellis, B. J., Del Giudice, M., Dishion, T. J., Figueredo, A. J., Gray, P., Griskevicius, V., ... Wilson, D. S. (2012). The evolutionary basis of risky adolescent behavior: Implications for science, policy, and practice. *Developmental Psychology, 48*(3), 598–623. doi:10.1037/a0026220
- Elstad, J. I., & Stefansen, K. (2014). Social variations in perceived parenting styles among Norwegian adolescents. *Child Indicators Research, 7*(3), 649–670. doi:10.1007/s12187-014-9239-5
- Erginoz, E., Alikasifoglu, M., Ercan, O., Uysal, O., Alp, Z., Ocak, S., ... Albayrak Kaymak, D. (2015). The role of parental, school, and peer factors in adolescent bullying involvement: Results from the Turkish HBSC 2005/2006 study. *Asia Pacific Journal of Public Health, 27*(2), NP1591–NP1603. doi:10.1177/1010539512473144
- Erhabor, S. I. (2013). EPQ and self-esteem scores of male and female bullies in Mafikeng schools, South Africa. *Gender & Behaviour, 11*(1), 5208–5219. Retrieved from <https://www.ajol.info/index.php/gab/index>
- Eslea, M., & Rees, J. (2001). At what age are children most likely to be bullied at school? *Aggressive Behavior, 27*(6), 419–429. doi:10.1002/ab.1027
- Espelage, D. L., Low, S., & De la Rue, L. (2012). Relations between peer victimization subtypes, family violence, and psychological outcomes during early adolescence. *Psychology of Violence, 2*(4), 313–324. doi:10.1037/a0027386
- Facebook. (2017). *Terms of Service*. Retrieved from <https://www.facebook.com/terms>
- Fagan, A. A., Van Horn, M. L., Antaramian, S., & Hawkins, J. D. (2011). How do families matter? Age and gender differences in family influences on delinquency and drug use. *Youth Violence and Juvenile Justice, 9*(2), 150–170. doi:10.1177/1541204010377748
- Fanti, K. A., & Georgiou, S. (2012). Bullies and their mothers: Who influence whom? *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, 6*(6), 1215–1221. Retrieved from <https://www.waset.org/journal/Social>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Fanti, K. A., & Georgiou, S. N. (2013). Bullying, victimization, school performance, and mother-child relationship quality: Direct and transactional associations. *Journal of Criminology*, 2013, 1–11. doi:10.1155/2013/289689
- Faris, R., & Felmlee, D. (2011). Status struggles: Network centrality and gender segregation in same- and cross-gender aggression. *American Sociological Review*, 76(1), 48–73. doi:10.1177/0003122410396196
- Farmer, T. W., Hamm, J. V., Leung, M.-C., Lambert, K., & Gravelle, M. (2011). Early adolescent peer ecologies in rural communities: Bullying in schools that do and do not have a transition during the middle grades. *Journal of Youth and Adolescence*, 40(9), 1106–1117. doi:10.1007/s10964-011-9684-0
- Farmer, T. W., Irvin, M. J., Motoca, L. M., Leung, M.-C., Hutchins, B. C., Brooks, D. S., & Hall, C. M. (2015). Externalizing and internalizing behavior problems, peer affiliations, and bullying involvement across the transition to middle school. *Journal of Emotional and Behavioral Disorders*, 23(1), 3–16. doi:10.1177/1063426613491286
- Farrell, A. H., Della Cioppa, V., Volk, A. A., & Book, A. S. (2014). Predicting bullying heterogeneity with the HEXACO model of personality. *International Journal of Advances in Psychology*, 3(2), 30–39. doi:10.14355/ijap.2014.0302.02
- Farrington, D. P., & Ttofi, M. M. (2009). How to reduce school bullying. *Victims & Offenders*, 4(4), 321–326. doi:10.1080/15564880903227255
- Fearon, R. P., Bakermans-Kranenburg, M. J., Van Ijzendoorn, M. H., Lapsley, A.-M., & Roisman, G. I. (2010). The significance of insecure attachment and disorganization in the development of children's externalizing behavior: A meta-analytic study. *Child Development*, 81(2), 435–456. doi:10.1111/j.1467-8624.2009.01405.x
- Feldman, R. (2017). The neurobiology of human attachments. *Trends in Cognitive Sciences*, 21(2), 80–99. doi: 10.1016/j.tics.2016.11.007
- Felix, E. D., Sharkey, J. D., Green, J. G., Furlong, M. J., & Tanigawa, D. (2011). Getting precise and pragmatic about the assessment of bullying: The development of the California Bullying Victimization Scale. *Aggressive Behavior*, 37(3), 234–247. doi:10.1002/ab.20389

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Field, A. (2013). *Discovering statistics using IBM SPSS Statistics* (4th ed.). London: Sage Publications Limited.
- Fine, G. A. (1986). The dirty play of little boys. *Society*, 24(1), 63–67. doi: 10.1007/BF02695941
- Finger, L. R., Marsh, H. W., Craven, R. G., & Parada, R. H. (2005, November). *Strengthening anti-bullying research: An investigation into the misuse of dichotomous variables*. Paper presented at the Australian Association for Research in Education International Conference, Parramatta, Australia.
- Finger, L. R., Yeung, A. S., Craven, R. G., Parada, R. H., & Newey, K. (2008, November). *Adolescent Peer Relations Instrument: Assessment of its reliability and construct validity when used with upper primary students*. Paper presented at the Australian Association for Research in Education Annual Conference, Brisbane. Centre for Educational Research, University of Western Sydney, and Catholic Education, Diocese of Parramatta.
- Fishbane, M. D. (2007). Wired to connect: Neuroscience, relationships, and therapy. *Family Process*, 46(3), 395–412. doi: 10.1111/j.1545-5300.2007.00219.x
- Fitton, V. A. (2012). Attachment theory: History, research, and practice. *Psychoanalytic Social Work*, 19(1–2), 121–143. doi:10.1080/15228878.2012.666491
- Fitzpatrick, K. M., Dulin, A., & Piko, B. (2010). Bullying and depressive symptomatology among low-income, African–American youth. *Journal of Youth and Adolescence*, 39(6), 634–645. doi:10.1007/s10964-009-9426-8
- Fletcher, A. C., & Johnston, C. A. (2016). Parenting behaviors and child externalizing: A short-term investigation of directionality. *Journal of Child and Family Studies*, 25(10), 3150–3159. doi:10.1007/s10826-016-0467-9
- Foster, J. J., & Parker, I. (1999). *Carrying out investigations in psychology*. Leicester, UK: BPS Books.
- Fouladi, R. T., Moller, N. P., & McCarthy, C. J. (2006). Examination of internal consistency and construct validity of scores on the Parental Attachment Scale: Preliminary

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

psychometric results. *Measurement and Evaluation in Counseling and Development*, 39(1), 2–30.

- Fousiani, K., Dimitropoulou, P., Michaelides, M. P., & Van Petegem, S. (2016). Perceived parenting and adolescent cyber-bullying: Examining the intervening role of autonomy and relatedness need satisfaction, empathic concern and recognition of humanness. *Journal of Child and Family Studies*, 25(7), 2120–2129. doi:10.1007/s10826-016-0401-1
- Fraley, R. C. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*, 6(2), 123–151. doi:10.1207/S15327957PSPR0602_03
- Fraley, R. C., & Spieker, S. J. (2003). Are infant attachment patterns continuously or categorically distributed? A taxometric analysis of strange situation behavior. *Developmental Psychology*, 39(3), 387–404. doi:10.1037/0012-1649.39.3.387
- Fraley, R. C., Vicary, A. M., Brumbaugh, C. C., & Roisman, G. I. (2011). Patterns of stability in adult attachment: An empirical test of two models of continuity and change. *Journal of Personality and Social Psychology*, 101(5), 974–992. doi:10.1037/a0024150
- Free State Department of Education (2015). *Free State – Learners per sector and grade (2015-03-19)*. Retrieved from <http://www.fsdoe.fs.gov.za/documents/reports/7%20Free%20State%20Summary/Learner%20Numbers/2015%20Archive/Learners%20per%20Grade%20FREE%20STATE%20SUMMARY%2019%20March%202015.pdf>
- Free State Department of Education (2017). *School finder*. Retrieved from <http://fsdoe.fs.gov.za/SchoolFinder/Schoolfinder.aspx>
- Fridh, M., Lindström, M., & Rosvall, M. (2015). Subjective health complaints in adolescent victims of cyber harassment: Moderation through support from parents/friends - A Swedish population-based study. *BMC Public Health*, 15(949), 1–11. doi:10.1186/s12889-015-2239-7
- Friedson, M., & Sharkey, P. (2015). Violence and neighborhood disadvantage after the crime decline. *The ANNALS of the American Academy of Political and Social Science*, 660(1), 341–358. doi:10.1177/0002716215579825

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Frisén, A., Holmqvist, K., & Oscarsson, D. (2008). 13-year-olds' perception of bullying: Definitions, reasons for victimisation and experience of adults' response. *Educational Studies, 34*(2), 105–117. doi:10.1080/03055690701811149
- Frisén, A., Jonsson, A.-K., & Persson, C. (2007). Adolescents' perception of bullying: Who is the victim? Who is the bully? What can be done to stop bullying? *Adolescence, 42*(168), 749–761. Retrieved from http://www.worldcat.org/title/adolescence/oclc/841014797&referer=brief_results
- Fu, Q., Land, K. C., & Lamb, V. L. (2016). Violent physical bullying victimization at school: Has there been a recent increase in exposure or intensity? An age-period-cohort analysis in the United States, 1991 to 2012. *Child Indicators Research, 9*(2), 485–513. doi:10.1007/s12187-015-9317-3
- Furlong, M. J., Sharkey, J. D., Felix, E. D., Tanigawa, D., & Green, J. G. (2010). Bullying assessment: A call for increased precision of self-reporting procedures. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 329–346) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=IW2NAgAAQBAJ&printsec=frontcover&dq=Handbook+of+bullying+in+schools:+An+international+perspective&hl=en&sa=X&ved=0ahUKewigw7-b7s7TAhU LM8AKHW2GChMQ6AEIJTAB#v=snippet&q=Furlong&f=false>
- Galambos, N. L., Barker, E. T., & Almeida, D. M. (2003). Parents *do* matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development, 74*(2), 578–594. doi:10.1111/1467-8624.7402017
- Gallarin, M., & Alonso-Arbiol, I. (2012). Parenting practices, parental attachment and aggressiveness in adolescence: A predictive model. *Journal of Adolescence, 35*(6), 1601–1610. doi:10.1016/j.adolescence.2012.07.002
- García, A. I. S., & Margallo, E. M. (2014). Bullying: What's going on? A bibliographic review of last twelve months. *Procedia - Social and Behavioral Sciences, 132*, 269–276. doi:10.1016/j.sbspro.2014.04.309
- García Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Vázquez García, H. (1996). An integrative model for the study of developmental

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

competencies in minority children. *Child Development*, 67(5), 1891–1914. doi:10.1111/j.1467-8624.1996.tb01834.x

Gasser, L., & Keller, M. (2009). Are the competent the morally good? Perspective taking and moral motivation of children involved in bullying. *Social Development*, 18(4), 798–816. doi:10.1111/j.1467-9507.2008.00516.x

Gelling, L. (1999). Ethical principles in healthcare research. *Nursing Standard*, 13(36), 39–42. doi:10.7748/ns1999.05.13.36.39.c2607

Georgiou, S. N. (2008). Parental style and child bullying and victimization experiences at school. *Social Psychology of Education*, 11(3), 213–227. doi:10.1007/s11218-007-9048-5

Georgiou, S. N., & Fanti, K. A. (2010). A transactional model of bullying and victimization. *Social Psychology of Education*, 13(3), 295–311. doi:10.1007/s11218-010-9116-0

Georgiou, S. N., Fousiani, K., Michaelides, M., & Stavrinides, P. (2013). Cultural value orientation and authoritarian parenting as parameters of bullying and victimization at school. *International Journal of Psychology*, 48(1), 69–78. doi:10.1080/00207594.2012.754104

Georgiou, S. N., & Stavrinides, P. (2013). Parenting at home and bullying at school. *Social Psychology of Education*, 16(2), 165–179. doi:10.1007/s11218-012-9209-z

Germishuys, G. (2016, December 5). Girl bloodied in bully attack at Stellenbosch school. *News24*. Retrieved from <http://www.news24.com/SouthAfrica/News/girl-bloodied-in-bully-attack-at-stellenbosch-school-20161205>

Gini, G. (2006). Social cognition and moral cognition in bullying: What's wrong? *Aggressive Behavior*, 32(6), 528–539. doi:10.1002/ab.20153

Gloger-Tippelt, G., & Kappler, G. (2016). Narratives of attachment in middle childhood: Do gender, age, and risk-status matter for the quality of attachment? *Attachment & Human Development*, 18(6), 570–595. doi:10.1080/14616734.2016.1194440

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Godleski, S. A., & Ostrov, J. M. (2010). Relational aggression and hostile attribution biases: Testing multiple statistical methods and models. *Journal of Abnormal Child Psychology*, *38*(4), 447–458. doi:10.1007/s10802-010-9391-4
- Goldsmid, S., & Howie, P. (2014). Bullying by definition: An examination of definitional components of bullying. *Emotional and Behavioural Difficulties*, *19*(2), 210–225. doi:10.1080/13632752.2013.844414
- Gómez-Ortiz, O., Romera, E. M., & Ortega-Ruiz, R. (2016). Parenting styles and bullying. The mediating role of parental psychological aggression and physical punishment. *Child Abuse & Neglect*, *51*, 132–143. doi:10.1016/j.chiabu.2015.10.025
- Google. (2017). *My Account – Google*. Retrieved from <https://myaccount.google.com/>
- Gorrese, A., & Ruggieri, R. (2012). Peer attachment: A meta-analytic review of gender and age differences and associations with parent attachment. *Journal of Youth and Adolescence*, *41*(5), 650–672. doi:10.1007/s10964-012-9759-6
- Gower, A. L., McMorris, B. J., & Eisenberg, M. E. (2015). School-level contextual predictors of bullying and harassment experiences among adolescents. *Social Science & Medicine*, *147*, 47–53. doi:10.1016/j.socscimed.2015.10.036
- Granot, D., & Maysel, O. (2012). Representations of mother-child attachment relationships and social-information processing of peer relationships in early adolescence. *The Journal of Early Adolescence*, *32*(4), 537–564. doi:10.1177/0272431611403482
- Gravetter, F. J., & Wallnau, L. B. (2000). *Statistics for the behavioural sciences* (5th ed.). Belmont, CA: Wadsworth.
- Graybill, D., & Gabel, H. (1978). Factor analysis of the Children's Reports of Parental Behavior Inventory: A replication for preadolescents. *Psychological Reports*, *42*(3), 953–954. doi:10.2466/pr0.1978.42.3.953
- Greeff, P., & Grobler, A. A. (2008). Bullying during the intermediate school phase: A South African study. *Childhood*, *15*(1), 127–144. doi:10.1177/0907568207086840

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Green, J. G., Felix, E. D., Sharkey, J. D., Furlong, M. J., & Kras, J. E. (2013). Identifying bully victims: Definitional versus behavioral approaches. *Psychological Assessment, 25*(2), 651–657. doi:10.1037/a0031248
- Griezel, L., Finger, L. R., Bodkin-Andrews, G. H., Craven, R. G., & Yeung, A. S. (2012). Uncovering the structure of and gender and developmental differences in cyber bullying. *The Journal of Educational Research, 105*(6), 442–455. doi:10.1080/00220671.2011.629692
- Griffin, R. S., & Gross, A. M. (2004). Childhood bullying: Current empirical findings and future directions for research. *Aggression and Violent Behavior, 9*(4), 379–400. doi:10.1016/S1359-1789(03)00033-8
- Grolnick, W. S. (2003). *The psychology of parental control: How well-meant parenting backfires* [Google Books version]. Retrieved from <https://books.google.co.za/books?id=zQr7xM8ex0IC&printsec=frontcover&dq=The+Psychology+of+Parental+Control:+How+Well-meant+Parenting+Backfires&hl=en&sa=X&ved=0ahUKEwi75oaMxafUAhXJLMAKHYPaj8Q6AEIKDAB#v=onepage&q=The%20Psychology%20of%20Parental%20Control%20How%20Well-meant%20Parenting%20Backfires&f=false>
- Grolnick, W. S., & Pomerantz, E. M. (2009). Issues and challenges in studying parental control: Toward a new conceptualization. *Child Development Perspectives, 3*(3), 165–170. doi:10.1111/j.1750-8606.2009.00099.x
- Gross, H. E., Shaw, D. S., & Moilanen, K. L. (2008). Reciprocal associations between boys' externalizing problems and mothers' depressive symptoms. *Journal of Abnormal Child Psychology, 36*(5), 693–709. doi:10.1007/s10802-008-9224-x
- Grové, L. C., & Naudé, L. (2016). Identity status and perceived parenting style in adolescents living in central South Africa. *Journal of Psychology in Africa, 26*(2), 189–193. Retrieved from <http://www.tandfonline.com/loi/rpia20>
- Guerra, N. G., Williams, K. R., & Sadek, S. (2011). Understanding bullying and victimization during childhood and adolescence: A mixed methods study. *Child Development, 82*(1), 295–310. doi:10.1111/j.1467-8624.2010.01556.x

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Gullone, E., & Robinson, K. (2005). The Inventory of Parent and Peer Attachment-Revised (IPPA-R) for Children: A psychometric investigation. *Clinical Psychology & Psychotherapy*, *12*(1), 67–79. doi:10.1002/cpp.433
- Güngör, D., & Bornstein, M. H. (2010). Culture-general and -specific associations of attachment avoidance and anxiety with perceived parental warmth and psychological control among Turk and Belgian adolescents. *Journal of Adolescence*, *33*(5), 593–602. doi: 10.1016/j.adolescence.2009.12.005
- Habashy Hussein, M. (2013). The social and emotional skills of bullies, victims, and bully–victims of Egyptian primary schoolchildren. *International Journal of Psychology*, *48*(5), 910–921. doi:10.1080/00207594.2012.702908
- Haltigan, J. D., & Vaillancourt, T. (2014). Joint trajectories of bullying and peer victimization across elementary and middle school and associations with symptoms of psychopathology. *Developmental Psychology*, *50*(11), 2426–2436. doi:10.1037/a0038030
- Hanish, L. D., Bradshaw, C. P., Espelage, D. L., Rodkin, P. C., Swearer, S. M., & Horne, A. (2013). Looking toward the future of bullying research: Recommendations for research and funding priorities. *Journal of School Violence*, *12*(3), 283–295. doi:10.1080/15388220.2013.788449
- Hare, A. L., Marston, E. G., & Allen, J. P. (2011). Maternal acceptance and adolescents' emotional communication: A longitudinal study. *Journal of Youth and Adolescence*, *40*(6), 744–751. doi:10.1007/s10964-010-9586-6
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, *5*(1), 1–22. doi:10.1207/s15327965pli0501_1
- Hazzard, A., Christensen, A., & Margolin, G. (1983). Children's perceptions of parental behaviors. *Journal of Abnormal Child Psychology*, *11*(1), 49–59. doi:10.1007/BF00912177

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Health Professions Council of South Africa. (2008). *Guidelines for good practice in the health care professions: Booklet 6: General ethical guidelines for health researchers*. Pretoria: Author.
- Healy, K. L., Sanders, M. R., & Iyer, A. (2015). Parenting practices, children's peer relationships and being bullied at school. *Journal of Child and Family Studies*, 24(1), 127–140. doi:10.1007/s10826-013-9820-4
- Hellström, L., Persson, L., & Hagquist, C. (2015). Understanding and defining bullying – Adolescents' own views. *Archives of Public Health*, 73(4), 1–9. doi:10.1186/2049-3258-73-4
- Hemphill, S. A., Tollit, M., Kotevski, A., & Heerde, J. A. (2015). Predictors of traditional and cyber-bullying victimization: A longitudinal study of Australian secondary school students. *Journal of Interpersonal Violence*, 30(15), 2567–2590. doi:10.1177/0886260514553636
- Herting, M. M., & Sowell, E. R. (2017). Puberty and structural brain development in humans. *Frontiers in Neuroendocrinology*, 44, 122–137. doi: 10.1016/j.yfrne.2016.12.003
- Hill, J. P., & Lynch, M. E. (1983). The intensification of gender-related role expectations during early adolescence. In J. Brooks-Gunn & A. C. Petersen (Eds.), *Girls at puberty: Biological and psychosocial perspectives* (pp. 201–228) [Adobe Digital Editions version]. Retrieved from <https://books.google.co.za/books?id=aRfrBwAAQBAJ&pg=PA201&dq=The+intensification+of+gender-related+role+expectations+during+early+adolescence&hl=en&sa=X&ved=0ahUKEwiU9uHPqpTRAhUsK8AKHWm6ArAQ6AEIGTAA#v=onepage&q=The intensification of gender-related role e>
- Hill, N. E., Bromell, L., Tyson, D. F., & Flint, R. (2007). Developmental commentary: Ecological perspectives on parental influences during adolescence. *Journal of Clinical Child & Adolescent Psychology*, 36(3), 367–377. doi:10.1080/15374410701444322
- Hilton, J. M., Anngela-Cole, L., & Wakita, J. (2010). A cross-cultural comparison of factors associated with school bullying in Japan and the United States. *The Family Journal*, 18(4), 413–422. doi:10.1177/1066480710372919

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior, 29*(2), 129–156. doi:10.1080/01639620701457816
- Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research, 14*(3), 206–221. doi:10.1080/13811118.2010.494133
- Hinshaw, S. P. (2013). Developmental psychopathology as a scientific discipline: Rationale, principles, and advances. In T. P. Beauchaine & S. P. Hinshaw (Eds.), *Child and adolescent psychopathology* (2nd ed., pp. 1–18) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=SfswPYqNJOIC&printsec=frontcover&dq=child+and+adolescent+psychopathology,+beauchaine,+hinshaw&hl=en&sa=X&ved=0ahUKewiMIMKWqvvQAhVILsAKHeUoCDoQ6AEIHjAA#v=onepage&q=childandadolescentpsychopathology%2C%20beauchaine%2C%20hinshaw>
- Hoeve, M., Dubas, J. S., Eichelsheim, V. I., Van der Laan, P. H., Smeenk, W., & Gerris, J. R. M. (2009). The relationship between parenting and delinquency: A meta-analysis. *Journal of Abnormal Child Psychology, 37*(6), 749–775. doi:10.1007/s10802-009-9310-8
- Hoeve, M., Stams, G. J. J. M., Van der Put, C. E., Dubas, J. S., Van der Laan, P. H., & Gerris, J. R. M. (2012). A meta-analysis of attachment to parents and delinquency. *Journal of Abnormal Child Psychology, 40*(5), 771–785. doi:10.1007/s10802-011-9608-1
- Hokoda, A., Lu, H.-H. A., & Angeles, M. (2006). School bullying in Taiwanese adolescents. *Journal of Emotional Abuse, 6*(4), 69–90. doi:10.1300/J135v06n04_04
- Holfeld, B., & Leadbeater, B. J. (2015). The nature and frequency of cyber bullying behaviors and victimization experiences in young Canadian children. *Canadian Journal of School Psychology, 30*(2), 116–135. doi:10.1177/0829573514556853
- Hong, J. S., & Espelage, D. L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and Violent Behavior, 17*(4), 311–322. doi:10.1016/j.avb.2012.03.003
- Hoskins, D. H. (2014). Consequences of parenting on adolescent outcomes. *Societies, 4*(3), 506–531. doi:10.3390/soc4030506

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Howell, D. C. (2013). *Statistical methods for psychology* (8th ed.). Belmont, CA: Wadsworth.
- Huitsing, G., Snijders, T. A. B., Van Duijn, M. A. J., & Veenstra, R. (2014). Victims, bullies, and their defenders: A longitudinal study of the coevolution of positive and negative networks. *Development and Psychopathology*, 26(3), 645–659. doi:10.1017/S0954579414000297
- Humfress, H., O'Connor, T. G., Slaughter, J., Target, M., & Fonagy, P. (2002). General and relationship-specific models of social cognition: Explaining the overlap and discrepancies. *Journal of Child Psychology and Psychiatry*, 43(7), 873–883. doi:10.1111/1469-7610.0013_7
- Hyde, L. W., Shaw, D. S., & Moilanen, K. L. (2010). Developmental precursors of moral disengagement and the role of moral disengagement in the development of antisocial behavior. *Journal of Abnormal Child Psychology*, 38(2), 197–209. doi:10.1007/s10802-009-9358-5
- Hymel, S., & Bonanno, R. A. (2014). Moral disengagement processes in bullying. *Theory Into Practice*, 53(4), 278–285. doi:10.1080/00405841.2014.947219
- Ialongo, N. S., Rogosch, F. A., Cicchetti, D., Toth, S. L., Buckley, J., Petras, H., & Neiderhiser, J. (2006). A developmental psychopathology approach to the prevention of mental health disorders. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (2nd ed., Vol. 1, pp. 968–1018) [Google Books version]. Retrieved from https://books.google.co.za/books?id=kNQA8r5zcVcC&printsec=frontcover&dq=Developmental+psychopathology:+Theory+and+method&hl=en&sa=X&ved=0ahUKEwj_p8_Pl87TAhVLAcAKHYeUB9kQ6AEIJTAA#v=onepage&q=Developmental%20psychopathology%3A%20Theory%20and%20method&f=false
- Imenda, S. (2014). Is there a conceptual difference between theoretical and conceptual frameworks? *Journal of Social Sciences*, 38(2), 185–195. Retrieved from <http://www.krepublishers.com/02-Journals/JSS/JSS-00-0-000-000-1997-Web/JSS-00-0-000-000-1997-1-Cover.htm>
- Instagram. (2017). *Terms of Use*. Retrieved from <https://www.instagram.com/about/legal/terms/before-january-19-2013/>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Jabaghourian, J. J., Sorkhabi, N., Quach, W., & Strage, A. (2014). Parenting styles and practices of Latino parents and Latino fifth graders' academic, cognitive, social, and behavioral outcomes. *Hispanic Journal of Behavioral Sciences, 36*(2), 175–194. doi:10.1177/0739986314523289
- Jabeen, F., Anis-ul-Haque, M., & Riaz, M. N. (2013). Parenting styles as predictors of emotion regulation among adolescents. *Pakistan Journal of Psychological Research, 28*(1), 85–105. Retrieved from <http://www.pjprnip.edu.pk/pjpr/index.php/pjpr>
- Jansen, D. E. M. C., Veenstra, R., Ormel, J., Verhulst, F. C., & Reijneveld, S. A. (2011). Early risk factors for being a bully, victim, or bully/victim in late elementary and early secondary education: The longitudinal TRAILS study. *BMC Public Health, 11*(440), 1–7. doi:10.1186/1471-2458-11-440
- Janssens, A., Goossens, L., Van den Noortgate, W., Colpin, H., Verschueren, K., & Van Leeuwen, K. (2015). Parents' and adolescents' perspectives on parenting: Evaluating conceptual structure, measurement invariance, and criterion validity. *Assessment, 22*(4), 473–489. doi:10.1177/1073191114550477
- Jenson, J. M., Brisson, D., Bender, K. A., & Williford, A. P. (2013). Effects of the youth matters prevention program on patterns of bullying and victimization in elementary and middle school. *Social Work Research, 37*(4), 361–372. doi:10.1093/swr/svt030
- Jiang, X., Huebner, E. S., & Hills, K. J. (2013). Parent attachment and early adolescents' life satisfaction: The mediating effect of hope. *Psychology in the Schools, 50*(4), 340–352. doi:10.1002/pits.21680
- Jiménez-Iglesias, A., Moreno, C., Ramos, P., & Rivera, F. (2015). What family dimensions are important for health-related quality of life in adolescence? *Journal of Youth Studies, 18*(1), 53–67. doi:10.1080/13676261.2014.933191
- Jin, M. K., Jacobvitz, D., Hazen, N., & Jung, S. H. (2012). Maternal sensitivity and infant attachment security in Korea: Cross-cultural validation of the Strange Situation. *Attachment & Human Development, 14*(1), 33–44. doi:10.1080/14616734.2012.636656

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Jolliffe, D., & Farrington, D. P. (2011). Is low empathy related to bullying after controlling for individual and social background variables? *Journal of Adolescence, 34*(1), 59–71. doi:10.1016/j.adolescence.2010.02.001
- Jordan, K., & Austin, J. (2012). A review of the literature on bullying in U.S. schools and how a parent–educator partnership can be an effective way to handle bullying. *Journal of Aggression, Maltreatment & Trauma, 21*(4), 440–458. doi:10.1080/10926771.2012.675420
- Jose, P. E., Kljakovic, M., Scheib, E., & Notter, O. (2012). The joint development of traditional bullying and victimization with cyber bullying and victimization in adolescence. *Journal of Research on Adolescence, 22*(2), 301–309. doi:10.1111/j.1532-7795.2011.00764.x
- Kahle, L., & Peguero, A. A. (2015). Bodies and bullying: The interaction of gender, race, ethnicity, weight, and inequality with school victimization. *Victims & Offenders, 12*(2), 323–345. doi:10.1080/15564886.2015.1117551
- Karavasilis, L., Doyle, A. B., & Markiewicz, D. (2003). Associations between parenting style and attachment to mother in middle childhood and adolescence. *International Journal of Behavioral Development, 27*(2), 153–164. doi: 10.1080/0165025024400015
- Kawabata, Y., Alink, L. R. A., Tseng, W.-L., Van Ijzendoorn, M. H., & Crick, N. R. (2011). Maternal and paternal parenting styles associated with relational aggression in children and adolescents: A conceptual analysis and meta-analytic review. *Developmental Review, 31*(4), 240–278. doi:10.1016/j.dr.2011.08.001
- Keller, T. E., Spieker, S. J., & Gilchrist, L. (2005). Patterns of risk and trajectories of preschool problem behaviors: A person-oriented analysis of attachment in context. *Development and Psychopathology, 17*(2), 349–384. doi:10.1017/S0954579405050170
- Kelly, E. V., Newton, N. C., Stapinski, L. A., Slade, T., Barrett, E. L., Conrod, P. J., & Teesson, M. (2015). Suicidality, internalizing problems and externalizing problems among adolescent bullies, victims and bully-victims. *Preventive Medicine, 73*, 100–105. doi:10.1016/j.ypmed.2015.01.020

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Kenney, S. R., Lac, A., Hummer, J. F., Grimaldi, E. M., & LaBrie, J. W. (2015). Pathways of parenting style on adolescents' college adjustment, academic achievement, and alcohol risk. *Journal of College Student Retention: Research, Theory & Practice, 17*(2), 186–203. doi:10.1177/1521025115578232
- Kerns, K. A., Aspelmeier, J. E., Gentzler, A. L., & Grabill, C. M. (2001). Parent-child attachment and monitoring in middle childhood. *Journal of Family Psychology, 15*(1), 69–81. doi:10.1037//0893-3200.15.1.69
- Kerns, K. A., Brumariu, L. E., & Seibert, A. (2011). Multi-method assessment of mother-child attachment: Links to parenting and child depressive symptoms in middle childhood. *Attachment & Human Development, 13*(4), 315–333. doi:10.1080/14616734.2011.584398
- Kerr, M., & Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. *Developmental Psychology, 36*(3), 366–380. doi:10.1037//0012-1649.36.3.366
- Kerr, M., Stattin, H., & Özdemir, M. (2012). Perceived parenting style and adolescent adjustment: Revisiting directions of effects and the role of parental knowledge. *Developmental Psychology, 48*(6), 1540–1553. doi:10.1037/a0027720
- Khaleque, A. (2013). Perceived parental warmth, and children's psychological adjustment, and personality dispositions: A meta-analysis. *Journal of Child and Family Studies, 22*(2), 297–306. doi:10.1007/s10826-012-9579-z
- Kim, K., & Rohner, R. P. (2002). Parental warmth, control, and involvement in schooling: Predicting academic achievement among Korean American adolescents. *Journal of Cross-Cultural Psychology, 33*(2), 127–140. doi:10.1177/0022022102033002001
- Kim, Y. S., Boyce, W. T., Koh, Y.-J., & Leventhal, B. L. (2009). Time trends, trajectories, and demographic predictors of bullying: A prospective study in Korean adolescents. *Journal of Adolescent Health, 45*(4), 360–367. doi:10.1016/j.jadohealth.2009.02.005
- Klein, M. (1997a). On observing the behaviour of young infants. In M. Klein (Ed.), *Envy and gratitude and other works 1946-1963* (pp. 94–121) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=zLAO1gbaRj4C&printsec=frontcover&dq=ed>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

itions:sgWqoDp8vvUC&hl=en&sa=X&ved=0ahUKEwiTz6KU9s7TAhWLA8AKHaS
HA_cQ6AEIITAA#v=onepage&q&f=false (Original work published in 1952)

Klein, M. (1997b). Envy and gratitude. In M. Klein (Ed.), *Envy and gratitude and other works 1946-1963* (pp. 176–235) [Google Books version]. Retrieved from https://books.google.co.za/books?id=zLAO1gbaRj4C&printsec=frontcover&dq=editions:sgWqoDp8vvUC&hl=en&sa=X&ved=0ahUKEwiTz6KU9s7TAhWLA8AKHaSHA_cQ6AEIITAA#v=onepage&q&f=false (Original work published in 1957)

Kljakovic, M., & Hunt, C. (2016). A meta-analysis of predictors of bullying and victimisation in adolescence. *Journal of Adolescence*, 49, 134–145. doi:10.1016/j.adolescence.2016.03.002

Klomek, A. B., Kopelman-Rubin, D., Al-Yagon, M., Berkowitz, R., Apter, A., & Mikulincer, M. (2016). Victimization by bullying and attachment to parents and teachers among student who report learning disorders and/or attention deficit hyperactivity disorder. *Learning Disability Quarterly*, 39(3), 182–190. doi:10.1177/0731948715616377

Knafo, A. (2003). Authoritarians, the next generation: Values and bullying among adolescent children of authoritarian fathers. *Analyses of Social Issues and Public Policy*, 3(1), 199–204. doi:10.1111/j.1530-2415.2003.00026.x

Kobak, R., Cassidy, J., Lyons-Ruth, K., & Ziv, Y. (2006). Attachment, stress, and psychopathology: A developmental pathways model. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (2nd ed., Vol. 1, pp. 333–369) [Google Books version]. Retrieved from https://books.google.co.za/books?id=kNQA8r5zcVcC&printsec=frontcover&dq=Developmental+psychopathology:+Theory+and+method&hl=en&sa=X&ved=0ahUKEwj_p8_PI87TAhVLAcAKHYeUB9kQ6AEIJTAA#v=onepage&q=Developmental%20psychopathology%3A%20Theory%20and%20method&f=false

Kobak, R., Rosenthal, N. L., Zajac, K., & Madsen, S. D. (2007). Adolescent attachment hierarchies and the search for an adult pair-bond. *New Directions for Child and Adolescent Development*, 2007(117), 57–72. doi:10.1002/cd.194

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Kochanska, G., & Kim, S. (2013). Early attachment organization with both parents and future behavior problems: From infancy to middle childhood. *Child Development, 84*(1), 283–296. doi:10.1111/j.1467-8624.2012.01852.x
- Kõiv, K. (2012). Attachment styles among bullies, victims and uninvolved adolescents. *Psychology Research, 2*(3), 160–165. Retrieved from <http://www.davidpublishing.com/davidpublishing/journals/J8/Psychology2011/physi2011/514.html>
- Kokkinos, C. M. (2013). Bullying and victimization in early adolescence: Associations with attachment style and perceived parenting. *Journal of School Violence, 12*(2), 174–192. doi:10.1080/15388220.2013.766134
- Kokkinos, C. M., Antoniadou, N., Asdre, A., & Voulgaridou, K. (2016). Parenting and Internet behavior predictors of cyber-bullying and cyber-victimization among preadolescents. *Deviant Behavior, 37*(4), 439–455. doi:10.1080/01639625.2015.1060087
- Kokkinos, C. M., Antoniadou, N., & Markos, A. (2014). Cyber-bullying: An investigation of the psychological profile of university student participants. *Journal of Applied Developmental Psychology, 35*(3), 204–214. doi:10.1016/j.appdev.2014.04.001
- Kokkinos, C. M., & Voulgaridou, I. (2016). Links between relational aggression, parenting and personality among adolescents. *European Journal of Developmental Psychology, 14*(3), 249–264. doi:10.1080/17405629.2016.1194265
- Koo, H. (2007). A time line of the evolution of school bullying in differing social contexts. *Asia Pacific Education Review, 8*(1), 107–116. doi:10.1007/BF03025837
- Korkmaz, B. (2011). Theory of mind and neurodevelopmental disorders of childhood. *Pediatric Research, 69*(5), 101R–108R. doi:10.1203/PDR.0b013e318212c177
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin, 140*(4), 1073–1137. doi:10.1037/a0035618

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Kowalski, R. M., & Limber, S. P. (2013). Psychological, physical, and academic correlates of cyberbullying and traditional bullying. *Journal of Adolescent Health, 53*(1), S13–S20. doi:10.1016/j.jadohealth.2012.09.018
- Kubiszewski, V., Fontaine, R., Potard, C., & Auzoult, L. (2015). Does cyberbullying overlap with school bullying when taking modality of involvement into account? *Computers in Human Behavior, 43*, 49–57. doi:10.1016/j.chb.2014.10.049
- Kubwalo, H. W., Muula, A. S., Siziya, S., Pasupulati, S., & Rudatsikira, E. (2013). Prevalence and correlates of being bullied among in-school adolescents in Malawi: Results from the 2009 Global School-based Health Survey. *Malawi Medical Journal, 25*(1), 12–14. Retrieved from <http://www.mmj.mw/>
- Kuppens, S., Grietens, H., Onghena, P., & Michiels, D. (2009a). Measuring parenting dimensions in middle childhood: Multitrait-multimethod analysis of child, mother, and father ratings. *European Journal of Psychological Assessment, 25*(3), 133–140. doi:10.1027/1015-5759.25.3.133
- Kuppens, S., Grietens, H., Onghena, P., & Michiels, D. (2009b). Relations between parental psychological control and childhood relational aggression: Reciprocal in nature? *Journal of Clinical Child & Adolescent Psychology, 38*(1), 117–131. doi:10.1080/15374410802575354
- Kuppens, S., Laurent, L., Heyvaert, M., & Onghena, P. (2013). Associations between parental psychological control and relational aggression in children and adolescents: A multilevel and sequential meta-analysis. *Developmental Psychology, 49*(9), 1697–1712. doi:10.1037/a0030740
- Laghi, F., Pallini, S., Baumgartner, E., & Baiocco, R. (2016). Parent and peer attachment relationships and time perspective in adolescence: Are they related to satisfaction with life? *Time & Society, 25*(1), 24–39. doi:10.1177/0961463X15577282
- Lamborn, S. D., & Felbab, A. J. (2003). Applying ethnic equivalence and cultural values models to African-American teens' perceptions of parents. *Journal of Adolescence, 26*(5), 601–618. doi:10.1016/S0140-1971(03)00059-9

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 62*(5), 1049–1065. doi:10.2307/1131151
- Langos, C. (2012). Cyberbullying: The challenge to define. *Cyberpsychology, Behavior, and Social Networking, 15*(6), 285–289. doi:10.1089/cyber.2011.0588
- Lansford, J. E., Chang, L., Dodge, K. A., Malone, P. S., Oburu, P., Palmérus, K., ... Quinn, N. (2005). Physical discipline and children's adjustment: Cultural normativeness as a moderator. *Child Development, 76*(6), 1234–1246. doi:10.1111/j.1467-8624.2005.00847.x
- Lansford, J. E., Criss, M. M., Laird, R. D., Shaw, D. S., Pettit, G. S., Bates, J. E., & Dodge, K. A. (2011). Reciprocal relations between parents' physical discipline and children's externalizing behavior during middle childhood and adolescence. *Development and Psychopathology, 23*(1), 225–238. doi:10.1017/S0954579410000751
- Lapidot-Lefler, N., & Dolev-Cohen, M. (2015). Comparing cyberbullying and school bullying among school students: Prevalence, gender, and grade level differences. *Social Psychology of Education, 18*(1), 1–16. doi:10.1007/s11218-014-9280-8
- Lavigne, J. V., LeBailly, S. A., Hopkins, J., Gouze, K. R., & Binns, H. J. (2009). The prevalence of ADHD, ODD, depression, and anxiety in a community sample of 4-year-olds. *Journal of Clinical Child & Adolescent Psychology, 38*(3), 315–328. doi:10.1080/15374410902851382
- Law, D. M., Shapka, J. D., & Olson, B. F. (2010). To control or not to control? Parenting behaviours and adolescent online aggression. *Computers in Human Behavior, 26*(6), 1651–1656. doi:10.1016/j.chb.2010.06.013
- Lee, C. (2006). Exploring teachers' definitions of bullying. *Emotional and Behavioural Difficulties, 11*(1), 61–75. doi:10.1080/13632750500393342
- Lee, C.-H. (2010). Personal and interpersonal correlates of bullying behaviors among Korean middle school students. *Journal of Interpersonal Violence, 25*(1), 152–176. doi:10.1177/0886260508329124

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Lee, S.-H. (2016). Cyberbullying in Eastern countries: Focusing on South Korea and other Eastern cultures. In R. Navarro, S. Yubero, & E. Larrañaga (Eds.), *Cyberbullying across the globe: Gender, family, and mental health* (pp. 149–167). doi:10.1007/978-3-319-25552-1
- Lehman, B. (2014). Gender differences in bullying victimization: The role of academics and school context. *Sociological Spectrum*, 34(6), 549–570. doi:10.1080/02732173.2014.947454
- Lemstra, M. E., Nielsen, G., Rogers, M. R., Thompson, A. T., & Moraros, J. S. (2012). Risk indicators and outcomes associated with bullying in youth aged 9-15 years. *Canadian Journal of Public Health*, 103(1), 9–13. Retrieved from <https://journal.cpha.ca/index.php/cjph>
- Lereya, S. T., Copeland, W. E., Zammit, S., & Wolke, D. (2015). Bully/victims: A longitudinal, population-based cohort study of their mental health. *European Child & Adolescent Psychiatry*, 24(12), 1461–1471. doi:10.1007/s00787-015-0705-5
- Lereya, S. T., Samara, M., & Wolke, D. (2013). Parenting behavior and the risk of becoming a victim and a bully/victim: A meta-analysis study. *Child Abuse & Neglect*, 37(12), 1091–1108. doi:10.1016/j.chiabu.2013.03.001
- Leung, L., & Lee, P. S. N. (2012). The influences of information literacy, Internet addiction and parenting styles on Internet risks. *New Media & Society*, 14(1), 117–136. doi:10.1177/1461444811410406
- Li, D., Zhang, W., & Wang, Y. (2015). Parental behavioral control, psychological control and Chinese adolescents' peer victimization: The mediating role of self-control. *Journal of Child and Family Studies*, 24(3), 628–637. doi:10.1007/s10826-013-9873-4
- Li, J., Fraser, M. W., & Wike, T. L. (2013). Promoting social competence and preventing childhood aggression: A framework for applying social information processing theory in intervention research. *Aggression and Violent Behavior*, 18(3), 357–364. doi:10.1016/j.avb.2013.01.001

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Li, N., He, J., & Li, T. (2009). Gender difference of insecure attachment: Universal or culture-specific? *Behavioral and Brain Sciences*, 32(1), 36–37. doi:10.1017/S0140525X09000181
- Liang, H., Flisher, A. J., & Lombard, C. J. (2007). Bullying, violence, and risk behavior in South African school students. *Child Abuse & Neglect*, 31(2), 161–171. doi:10.1016/j.chiabu.2006.08.007
- Litovsky, V. G., & Dusek, J. B. (1985). Perceptions of child rearing and self-concept development during the early adolescent years. *Journal of Youth and Adolescence*, 14(5), 373–387. doi:10.1007/BF02138833
- Liu, J., & Graves, N. (2011). Childhood bullying: A review of constructs, concepts, and nursing implications. *Public Health Nursing*, 28(6), 556–568. doi:10.1111/j.1525-1446.2011.00972.x
- Liu, M., & Guo, F. (2010). Parenting practices and their relevance to child behaviors in Canada and China. *Scandinavian Journal of Psychology*, 51(2), 109–114. doi:10.1111/j.1467-9450.2009.00795.x
- Locke, L. M., & Prinz, R. J. (2002). Measurement of parental discipline and nurturance. *Clinical Psychology Review*, 22(6), 895–929. doi:10.1016/S0272-7358(02)00133-2
- Low, S., & Espelage, D. (2013). Differentiating cyber bullying perpetration from non-physical bullying: Commonalities across race, individual, and family predictors. *Psychology of Violence*, 3(1), 39–52. doi:10.1037/a0030308
- Lucia, S. (2016). Correlates of bullying in Switzerland. *European Journal of Criminology*, 13(1), 50–66. doi:10.1177/1477370815608880
- Luxenberg, H., Limber, S. P., & Olweus, D. (2015). *Bullying in US schools: 2014 status report*. Center City, MN: Hazelden Betty Ford Foundation.
- Ma, C. Q., & Huebner, E. S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools*, 45(2), 177–190. doi:10.1002/pits.20288

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Ma, T.-L., & Bellmore, A. (2012). Peer victimization and parental psychological control in adolescence. *Journal of Abnormal Child Psychology*, *40*(3), 413–424. doi:10.1007/s10802-011-9576-5
- MacCallum, R. C., Zhang, S., Preacher, K. J., & Rucker, D. D. (2002). On the practice of dichotomization of quantitative variables. *Psychological Methods*, *7*(1), 19–40. doi:10.1037/1082-989X.7.1.19
- Maccoby, E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In E. M. Hetherington (Vol. Ed.), & P. H. Mussen (Series Ed.), *Handbook of child psychology, Volume 4: Socialization, personality, and social development* (4th ed., pp. 1–101). New York, NY: Wiley.
- MacKinnon, D. P. (2011). Integrating mediators and moderators in research design. *Research on Social Work Practice*, *21*(6), 675–681. doi:10.1177/1049731511414148
- Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research and intervention* (pp. 121–160) [Google Books version]. Retrieved from [https://books.google.co.za/books?id=WzHIfiCXE8EC&printsec=frontcover&dq=attachment+in+the+preschool+years&hl=en&sa=X&ved=0ahUKEwjPlcnJ2s3PAhWMK8AKHUdWB10Q6AEIzAA#v=onepage&q=attachment in the preschool years&f=false](https://books.google.co.za/books?id=WzHIfiCXE8EC&printsec=frontcover&dq=attachment+in+the+preschool+years&hl=en&sa=X&ved=0ahUKEwjPlcnJ2s3PAhWMK8AKHUdWB10Q6AEIzAA#v=onepage&q=attachment%20in%20the%20preschool%20years&f=false)
- Makri-Botsari, E., & Karagianni, G. (2014). Cyberbullying in Greek adolescents: The role of parents. *Procedia – Social and Behavioral Sciences*, *116*, 3241–3253. doi:10.1016/j.sbspro.2014.01.742
- Mandara, J. (2003). The typological approach in child and family psychology: A review of theory, methods, and research. *Clinical Child and Family Psychology Review*, *6*(2), 129–146. doi:10.1023/A:1023734627624
- Maneesriwongul, W., & Dixon, J. K. (2004). Instrument translation process: A methods review. *Journal of Advanced Nursing*, *48*(2), 175–186. doi:10.1111/j.1365-2648.2004.03185.x

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Manrique Millones, D. L., Van Leeuwen, K., & Ghesquière, P. (2013). Associations between psychosocial functioning and academic achievement: The Peruvian case. *Universitas Psychologica, 12*(3), 725–737. doi:10.11144/Javeriana.UPSY12-3.apfa
- Marceau, K., Dorn, L. D., & Susman, E. J. (2012). Stress and puberty-related hormone reactivity, negative emotionality, and parent–adolescent relationships. *Psychoneuroendocrinology, 37*(8), 1286–1298. doi:10.1016/j.psyneuen.2012.01.001
- Marcum, C. D., Higgins, G. E., Freiburger, T. L., & Ricketts, M. L. (2012). Battle of the sexes: An examination of male and female cyber bullying. *International Journal of Cyber Criminology, 6*(1), 904–911. Retrieved from <http://www.cybercrimejournal.com/>
- Marici, M. (2015). Psycho-behavioral consequences of parenting variables in adolescents. *Procedia – Social and Behavioral Sciences, 187*, 295–300. doi:10.1016/j.sbspro.2015.03.055
- Marini, Z. A., Dane, A. V., Bosacki, S. L., & Youth Lifestyle Choices – Community University Research Alliance. (2006). Direct and indirect bully-victims: Differential psychosocial risk factors associated with adolescents involved in bullying and victimization. *Aggressive Behavior, 32*(6), 551–569. doi:10.1002/ab.20155
- Markus, H. R. (2008). Pride, prejudice, and ambivalence: Toward a unified theory of race and ethnicity. *American Psychologist, 63*(8), 651–670. doi:10.1037/0003-066X.63.8.651
- Marsh, H. W., Nagengast, B., Morin, A. J. S., Parada, R. H., Craven, R. G., & Hamilton, L. R. (2011). Construct validity of the multidimensional structure of bullying and victimization: An application of exploratory structural equation modeling. *Journal of Educational Psychology, 103*(3), 701–732. doi:10.1037/a0024122
- Mashegoane, S., & Ramoloto, N. P. (2016). Attachment dimensions' capacity to predict problem behaviors in an African context. *South African Journal of Psychology, 46*(2), 266–277. doi:10.1177/0081246315603334
- Masten, A. S. (2006). Developmental psychopathology: Pathways to the future. *International Journal of Behavioral Development, 30*(1), 47–54. doi:10.1177/0165025406059974

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Masud, H., Thurasamy, R., & Ahmad, M. S. (2015). Parenting styles and academic achievement of young adolescents: A systematic literature review. *Quality & Quantity*, 49(6), 2411–2433. doi:10.1007/s11135-014-0120-x
- Mattanah, J. F., Lopez, F. G., & Govern, J. M. (2011). The contributions of parental attachment bonds to college student development and adjustment: A meta-analytic review. *Journal of Counseling Psychology*, 58(4), 565–596. doi:10.1037/a0024635
- Maunder, R. E., Harrop, A., & Tattersall, A. J. (2010). Pupil and staff perceptions of bullying in secondary schools: Comparing behavioural definitions and their perceived seriousness. *Educational Research*, 52(3), 263–282. doi:10.1080/00131881.2010.504062
- McCrae, R. R. (2004). Human nature and culture: A trait perspective. *Journal of Research in Personality*, 38(1), 3–14. doi:10.1016/j.jrp.2003.09.009
- McDonald, K. L., Baden, R. E., & Lochman, J. E. (2013). Parenting influences on the social goals of aggressive children. *Applied Developmental Science*, 17(1), 29–38. doi:10.1080/10888691.2013.748423
- McElhaney, K. B., Allen, J. P., Stephenson, J. C., & Hare, A. L. (2009). Attachment and autonomy during adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology, Volume 1: Individual bases of adolescent development* (3rd ed., pp. 358–403) [Google Books Version]. Retrieved from <https://books.google.co.za/books?id=HtdwZDroKxQC&pg=PA358&dq=Handbook+of+adolescent+psychology,+Attachment+and+autonomy+during+adolescence&hl=en&sa=X&ved=0ahUKEwjmsImNsLPUAhXpDsAKHaTmB9IQ6AEIIDA#v=onepage&q=Handbook%20of%20adolescent%20psychology%2C%20Attachment%20and%20autonomy%20during%20adolescence&f=false>
- Meland, E., Rydning, J. H., Lobben, S., Breidablik, H.-J., & Ekeland, T.-J. (2010). Emotional, self-conceptual, and relational characteristics of bullies and the bullied. *Scandinavian Journal of Public Health*, 38(4), 359–367. doi:10.1177/1403494810364563
- Menesini, E., Modena, M., & Tani, F. (2009). Bullying and victimization in adolescence: Concurrent and stable roles and psychological health symptoms. *The Journal of Genetic Psychology*, 170(2), 115–134. doi:10.3200/GNTP.170.2.115-134

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Menesini, E., & Nocentini, A. (2009). Cyberbullying definition and measurement: Some critical considerations. *Journal of Psychology, 217*(4), 230–232. doi:10.1027/0044-3409.217.4.230
- Menesini, E., Nocentini, A., & Calussi, P. (2011). The measurement of cyberbullying: Dimensional structure and relative item severity and discrimination. *Cyberpsychology, Behavior and Social Networking, 14*(5), 267–274. doi:10.1089/cyber.2010.0002
- Menesini, E., Nocentini, A., Palladino, B. E., Frisé, A., Berne, S., Ortega-Ruiz, R., ... Smith, P. K. (2012). Cyberbullying definition among adolescents: A comparison across six European countries. *Cyberpsychology, Behavior and Social Networking, 15*(9), 455–463. doi:10.1089/cyber.2012.0040
- Merrill, R. M., & Hanson, C. L. (2016). Risk and protective factors associated with being bullied on school property compared with cyberbullied. *BMC Public Health, 16*(145), 1–10. doi:10.1186/s12889-016-2833-3
- Michiels, D., Grietens, H., Onghena, P., & Kuppens, S. (2008). Parent–child interactions and relational aggression in peer relationships. *Developmental Review, 28*(4), 522–540. doi:10.1016/j.dr.2008.08.002
- Mills, C. B., & Carwile, A. M. (2009). The good, the bad, and the borderline: Separating teasing from bullying. *Communication Education, 58*(2), 276–301. doi:10.1080/03634520902783666
- Mishna, F., Khoury-Kassabri, M., Gadalla, T., & Daciuk, J. (2012). Risk factors for involvement in cyber bullying: Victims, bullies and bully–victims. *Children and Youth Services Review, 34*(1), 63–70. doi:10.1016/j.childyouth.2011.08.032
- Mishna, F., Pepler, D., & Wiener, J. (2006). Factors associated with perceptions and responses to bullying situations by children, parents, teachers, and principals. *Victims & Offenders, 1*(3), 255–288. doi:10.1080/15564880600626163
- Mitsopoulou, E., & Giovazolias, T. (2015). Personality traits, empathy and bullying behavior: A meta-analytic approach. *Aggression and Violent Behavior, 21*, 61–72. doi:10.1016/j.avb.2015.01.007

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Mlisa, L. N., Ward, C. L., Flisher, A. J., & Lombard, C. J. (2008). Bullying at rural high schools in the Eastern Cape Province, South Africa: Prevalence, and risk and protective factors at school and in the family. *Journal of Psychology in Africa, 18*(2), 261–268. Retrieved from <http://www.tandfonline.com/loi/rpia20>
- Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health, 55*(5), 602–611. doi:10.1016/j.jadohealth.2014.06.007
- Monks, C. P., Robinson, S., & Worlidge, P. (2012). The emergence of cyberbullying: A survey of primary school pupils' perceptions and experiences. *School Psychology International, 33*(5), 477–491. doi:10.1177/0143034312445242
- Monks, C. P., & Smith, P. K. (2006). Definitions of bullying: Age differences in understanding of the term, and the role of experience. *British Journal of Developmental Psychology, 24*(4), 801–821. doi:10.1348/026151005X82352
- Monks, C. P., Smith, P. K., & Swettenham, J. (2005). Psychological correlates of peer victimisation in preschool: Social cognitive skills, executive function and attachment profiles. *Aggressive Behavior, 31*(6), 571–588. doi:10.1002/ab.20099
- Moore, S. E., Norman, R. E., Sly, P. D., Whitehouse, A. J. O., Zubrick, S. R., & Scott, J. (2014). Adolescent peer aggression and its association with mental health and substance use in an Australian cohort. *Journal of Adolescence, 37*(1), 11–21. doi:10.1016/j.adolescence.2013.10.006
- Moretti, M. M., Dasilva, K., & Holland, R. (2004). Aggression from an attachment perspective: Gender issues and therapeutic implications. In M. M. Moretti, C. L. Odgers, & M. A. Jackson (Eds.), *Perspectives in Law and Psychology, Volume 19: Girls and aggression: Contributing factors and intervention principles* (pp. 41–56) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=zsejaPSuBj0C&pg=PA41&dq=aggression,+attachment&hl=en&sa=X&ved=0ahUKEwjnmbXM8LLRAhWj3YMKHRPxDhYQ6AEIJzAA#v=onepage&q=aggression%252Cattachment&f=false>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Mothander, P. R., & Wang, M. (2014). Parental rearing, attachment, and social anxiety in Chinese adolescents. *Youth & Society, 46*(2), 155–175. doi:10.1177/0044118X11427573
- Mpofu, E. (1994). Exploring the self-concept in an African culture. *The Journal of Genetic Psychology, 155*(3), 341–354. doi:10.1080/00221325.1994.9914784
- Muris, P., Meesters, C., & Van den Berg, S. (2003). Internalizing and externalizing problems as correlates of self-reported attachment style and perceived parental rearing in normal adolescents. *Journal of Child and Family Studies, 12*(2), 171–183. doi:10.1023/A:1022858715598
- Murray, K. W., Dwyer, K. M., Rubin, K. H., Knighton-Wisor, S., & Booth-LaForce, C. (2014). Parent–child relationships, parental psychological control, and aggression: Maternal and paternal relationships. *Journal of Youth and Adolescence, 43*(8), 1361–1373. doi:10.1007/s10964-013-0019-1
- Mynard, H., & Joseph, S. (2000). Development of the multidimensional peer-victimization scale. *Aggressive Behavior, 26*(2), 169–178. doi:10.1002/(SICI)1098-2337(2000)26:2<169::AID-AB3>3.0.CO;2-A
- Naruskov, K., Luik, P., Nocentini, A., & Menesini, E. (2012). Estonian students' perception and definition of cyberbullying. *Trames, 16*(4), 323–343. doi:10.3176/tr.2012.4.02
- Navarro, R., & Serna, C. (2015). Spanish youth perceptions about cyberbullying: Qualitative research into understanding cyberbullying and the role that parents play in its solution. In R. Navarro, S. Yubero, & E. Larrañaga (Eds.), *Cyberbullying across the globe: Gender, family, and mental health* (pp. 193–220). doi:10.1007/978-3-319-25552-1
- Navarro, R., Yubero, S., & Larrañaga, E. (2015). Psychosocial risk factors for involvement in bullying behaviors: Empirical comparison between cyberbullying and social bullying victims and bullies. *School Mental Health, 7*(4), 235–248. doi:10.1007/s12310-015-9157-9
- Ndebele, C., & Msiza, D. (2014). An analysis of the prevalence and effects of bullying at a remote rural school in the Eastern Cape Province of South Africa : Lessons for school principals. *Studies of Tribes and Tribals, 12*(1), 113–124. Retrieved from

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

<http://www.krepublishers.com/02-Journals/T%20&%20T/T%20&%20T-00-0-000-000-2003-Web/T%20&%20T-00-0-000-000-2003-1-Cover.htm>

- Nelson, D. A., & Coyne, S. M. (2009). Children's intent attributions and feelings of distress: Associations with maternal and paternal parenting practices. *Journal of Abnormal Child Psychology*, *37*(2), 223–237. doi:10.1007/s10802-008-9271-3
- Neser, J., Ladikos, A., & Prinsloo, J. (2004). Bullying in schools: An exploratory study. *Child Abuse Research in South Africa*, *5*(1), 5–18. Retrieved from <http://www.sapsac.co.za/carsa.html>
- Neser, J., Ovens, M., Van der Merwe, E., Morodi, R., & Ladikos, A. (2003). Bullying in schools: A general overview. *Acta Criminologica*, *16*(1), 127–157. Retrieved from <http://www.crimsa.ac.za/acta.html>
- Neuman, W. L. (1994). *Social research methods*. London: Allyn and Bacon.
- Nickerson, A. B., & Nagle, R. J. (2005). Parent and peer attachment in late childhood and early adolescence. *The Journal of Early Adolescence*, *25*(2), 223–249. doi:10.1177/0272431604274174
- Nielsen, M. B., Matthiesen, S. B., & Einarsen, S. (2010). The impact of methodological moderators on prevalence rates of workplace bullying. A meta-analysis. *Journal of Occupational and Organizational Psychology*, *83*(4), 955–979. doi:10.1348/096317909X481256
- Nielsen, M. B., Notelaers, G., & Einarsen, S. (2011). Measuring exposure to workplace bullying. In S. Einarsen, H. Hoel, D. Zapf, & C. L. Cooper (Eds.), *Bullying and harassment in the workplace: Developments in theory, research and practice* (2nd ed., pp. 149–174) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=h8qYxAhmhUAC&printsec=frontcover&dq=Bullying+and+emotional+abuse+in+the+workplace:+Developments+in+theory,+research+and+practice&hl=en&sa=X&ved=0ahUKEwjauIeCk87TAhUkJ8AKHckOABIQ6AEIJTAA#v=onepage&q=Bullying%20and%20emotional%20abuse%20in%20the%20workplace%3A%20Developments%20in%20theory%2C%20research%20and%20practice&f=false>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Nocentini, A., Calmaestra, J., Schultze-Krumbholz, A., Scheithauer, H., Ortega, R., & Menesini, E. (2010). Cyberbullying: Labels, behaviours and definition in three European countries. *Journal of Psychologists and Counsellors in Schools, 20*(2), 129–142. doi:10.1375/ajgc.20.2.129
- Nunes, S. A. N., Faraco, A. M. X., Vieira, M. L., & Rubin, K. H. (2013). Externalizing and internalizing problems: Contributions of attachment and parental practices. *Psicologia: Reflexão e Crítica, 26*(3), 617–625. doi:10.1590/S0102-79722013000300022
- Nylund, K., Bellmore, A., Nishina, A., & Graham, S. (2007). Subtypes, severity, and structural stability of peer victimization: What does latent class analysis say? *Child Development, 78*(6), 1706–1722. doi:10.1111/j.1467-8624.2007.01097.x
- O’Brennan, L. M., Bradshaw, C. P., & Sawyer, A. L. (2009). Examining developmental differences in the social-emotional problems among frequent bullies, victims, and bully/victims. *Psychology in the Schools, 46*(2), 100–115. doi:10.1002/pits.20357
- O’Brien, N. (2009). Secondary school teachers’ and pupils’ definitions of bullying in the UK: A systematic review. *Evidence & Policy, 5*(4), 399–427. doi:10.1332/174426409X478761
- O’Donnell, E. H., Moreau, M., Cardemil, E. V., & Pollastri, A. (2010). Interparental conflict, parenting, and childhood depression in a diverse urban population: The role of general cognitive style. *Journal of Youth and Adolescence, 39*(1), 12–22. doi:10.1007/s10964-008-9357-9
- Obioha, E. E., & T’soeunyane, P. G. (2012). The roles of the elderly in Sotho family system and society of Lesotho, Southern Africa. *The Anthropologist, 14*(3), 251–260. Retrieved from <http://www.krepublishers.com/theanthropologist.html>
- Olthof, T. & Goossens, F. A. (2007). Bullying and the need to belong: Early adolescents’ bullying-related behavior and the acceptance they desire and receive from particular classmates. *Social Development, 17*(1), 24–46. doi: 10.1111/j.1467-9507.2007.00413.x
- Olweus, D. (1980). Familial and temperamental determinants of aggressive behavior in adolescent boys: A casual analysis. *Developmental Psychology, 16*(6), 644–660. doi:10.1037/0012-1649.16.6.644

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Olweus, D. (1994). Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry*, 35(7), 1171–1190. doi:10.1111/j.1469-7610.1994.tb01229.x
- Olweus, D. (1999). Sweden. In P. K. Smith, Y. Morita, J. Junger-Tas, D. Olweus, R. Catalano, & P. Slee (Eds.), *The nature of school bullying: A cross-national perspective* (pp. 7–27) [Google Books version]. Retrieved from [https://books.google.co.za/books?id=4kNpAwAAQBAJ&pg=PR4&dq=The+nature+of+school+bullying:+A+cross+national+perspective+\(1999\)&hl=en&sa=X&ei=TOGPVJTICaXW7gb2zYHwBQ&ved=0CCQQ6AEwAA#v=onepage&q&f=false](https://books.google.co.za/books?id=4kNpAwAAQBAJ&pg=PR4&dq=The+nature+of+school+bullying:+A+cross+national+perspective+(1999)&hl=en&sa=X&ei=TOGPVJTICaXW7gb2zYHwBQ&ved=0CCQQ6AEwAA#v=onepage&q&f=false)
- Olweus, D. (2010). Understanding and researching bullying: Some critical issues. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 9–33) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=IW2NAgAAQBAJ&printsec=frontcover&dq=Handbook+of+bullying+in+schools:+An+international+perspective&hl=en&sa=X&ved=0ahUKEwigw7-b7s7TAhULM8AKHW2GChMQ6AEIJTAB#v=snippet&q=Furlong&f=false>
- Olweus, D. (2011). Bullying at school and later criminality: Findings from three Swedish community samples of males. *Criminal Behaviour and Mental Health*, 21(2), 151–156. doi:10.1002/cbm.806
- Olweus, D. (2013). School bullying: Development and some important challenges. *Annual Review of Clinical Psychology*, 9, 751–780. doi:10.1146/annurev-clinpsy-050212-185516
- Orlansky, H. (1949). Infant care and personality. *Psychological Bulletin*, 46(1), 1–48. doi:10.1037/h0058106
- Ortega, R., Elipe, P., Mora-Merchán, J. A., Calmaestra, J., & Vega, E. (2009). The emotional impact on victims of traditional bullying and cyberbullying: A study of Spanish adolescents. *Journal of Psychology*, 217(4), 197–204. doi:10.1027/0044-3409.217.4.197

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Overholser, J. C. (2015). Training the scientist–practitioner in the twenty-first century: A risk–benefit analysis. *Counselling Psychology Quarterly*, 28(3), 220–234. doi:10.1080/09515070.2015.1052779
- Owusu, A., Hart, P., Oliver, B., & Kang, M. (2011). The association between bullying and psychological health among senior high school students in Ghana, West Africa. *Journal of School Health*, 81(5), 231–238. doi:10.1111/j.1746-1561.2011.00590.x
- Paikoff, R. L., & Brooks-Gunn, J. (1991). Do parent-child relationships change during puberty? *Psychological Bulletin*, 110(1), 47–66. doi:10.1037//0033-2909.110.1.47
- Papadaki, E., & Giovazolias, T. (2015). The protective role of father acceptance in the relationship between maternal rejection and bullying: A moderated-mediation model. *Journal of Child and Family Studies*, 24(2), 330–340. doi:10.1007/s10826-013-9839-6
- Parada, R. H. (2000). Adolescent Peer Relations Instrument: A theoretical and empirical basis for the measurement of participant roles in bullying and victimisation of adolescence: An interim test manual and a research monograph: A test manual. Publication Unit, Self-concept Enhancement and Learning Facilitation (SELF) Research Centre, University of Western Sydney
- Parada, R. H. (2006). *School bullying: Psychosocial determinants and effective intervention* (Unpublished doctoral dissertation). University of Western Sydney, Sydney, Australia.
- Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2006). Peer relationships, child development, and adjustment: A developmental psychopathology perspective. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (2nd ed., Vol.1, pp. 419–493) [Google Books version]. Retrieved from https://books.google.co.za/books?id=kNQA8r5zcVcC&printsec=frontcover&dq=Developmental+psychopathology:+Theory+and+method&hl=en&sa=X&ved=0ahUKEwj_p8_P187TAhVLAcAKHYeUB9kQ6AEIJTAA#v=onepage&q=Developmental%20psychopathology%3A%20Theory%20and%20method&f=false
- Patchin, J. W., & Hinduja, S. (2011). Traditional and nontraditional bullying among youth: A test of general strain theory. *Youth & Society*, 43(2), 727–751. doi:10.1177/0044118X10366951

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Pavarini, G., De Hollanda Souza, D., & Hawk, C. K. (2013). Parental practices and theory of mind development. *Journal of Child and Family Studies*, 22(6), 844–853. doi:10.1007/s10826-012-9643-8
- Pearson, J. C., & Child, J. T. (2007). A cross-cultural comparison of parental and peer attachment styles among adult children from the United States, Puerto Rico, and India. *Journal of Intercultural Communication Research*, 36(1), 15–32. doi:10.1080/17475750701265258
- Peeters, M., Cillessen, A. H. N., & Scholte, R. H. J. (2010). Clueless or powerful? Identifying subtypes of bullies in adolescence. *Journal of Youth and Adolescence*, 39(9), 1041–1052. doi:10.1007/s10964-009-9478-9
- Penning, S. L., & Govender, K. (n.d.). *South African boys who bully: The relationship between bullying and trauma among adolescent male learners*. University of Natal, Durban. Retrieved from <https://www.inter-disciplinary.net/wp-content/uploads/2011/10/penningspaper.pdf>
- Peper, J. S., & Dahl, R. E. (2013). Surging hormones: Brain-behavior interactions during puberty. *Current Directions in Psychological Science*, 22(2), 134–139. doi:10.1177/0963721412473755
- Perren, S., & Hornung, R. (2005). Bullying and delinquency in adolescence: Victims' and perpetrators' family and peer relations. *Swiss Journal of Psychology*, 64(1), 51–64. doi:10.1024/1421-0185.64.1.51
- Perry, D. G., Hodges, E. V. E., & Egan, S. K. (2001). Determinants of chronic victimization by peers: A review and a new model of family influence. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 73–104). New York, NY: The Guilford Press.
- Perry, D. G., & Pauletti, R. E. (2011). Gender and adolescent development. *Journal of Research on Adolescence*, 21(1), 61–74. doi:10.1111/j.1532-7795.2010.00715.x
- Perry, R. E., Blair, C., & Sullivan, R. M. (2017). Neurobiology of infant attachment: Attachment despite adversity and parental programming of emotionality. *Current Opinion in Psychology*, 17, 1–6. doi:10.1016/j.copsyc.2017.04.022

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Peterson, L., & Rigby, K. (1999). Countering bullying at an Australian secondary school with students as helpers. *Journal of Adolescence*, 22(4), 481–492. doi:10.1006/jado.1999.0242
- Piaget, J. (2007). *The moral judgement of the child* [Google Books version]. Retrieved from <https://books.google.co.za/books?id=bf39AQAAQBAJ&printsec=frontcover&dq=The+moral+judgment+of+the+child&hl=en&sa=X&ved=0ahUKEwi0g4uA69zRAhXoLcAKHXqBCckQ6AEIGDAA#v=onepage&q=10&f=false> (Original work published in 1932)
- Pieschl, S., Porsch, T., Kahl, T., & Klockenbusch, R. (2013). Relevant dimensions of cyberbullying – Results from two experimental studies. *Journal of Applied Developmental Psychology*, 34(5), 241–252. doi:10.1016/j.appdev.2013.04.002
- Pietromonaco, P. R., & Barrett, L. F. (2000). The internal working models concept: What do we really know about the self in relation to others? *Review of General Psychology*, 4(2), 155–175. doi:10.1037/1089-2680.4.2.155
- Pinquart, M. (2015). Associations of parenting styles and dimensions with academic achievement in children and adolescents: A meta-analysis. *Educational Psychology Review*, 28(3), 475–493. doi:10.1007/s10648-015-9338-y
- Pinquart, M., Feußner, C., & Ahnert, L. (2013). Meta-analytic evidence for stability in attachments from infancy to early adulthood. *Attachment & Human Development*, 15(2), 189–218. doi:10.1080/14616734.2013.746257
- Polfuss, M., & Frenn, M. (2012). Parenting behaviors of African American and Caucasian families: Parent and child perceptions, associations with child weight, and ability to identify abnormal weight status. *Journal of Pediatric Nursing*, 27(3), 195–205. doi:10.1016/j.pedn.2011.03.012
- Pontzer, D. (2010). A theoretical test of bullying behavior: Parenting, personality, and the bully/victim relationship. *Journal of Family Violence*, 25(3), 259–273. doi:10.1007/s10896-009-9289-5

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Powell, M. D., & Ladd, L. D. (2010). Bullying: A review of the literature and implications for family therapists. *The American Journal of Family Therapy*, 38(3), 189–206. doi:10.1080/01926180902961662
- Power, T. G. (2013). Parenting dimensions and styles: A brief history and recommendations for future research. *Childhood Obesity*, 9(Supplement 1), S-14–S-21. doi:10.1089/chi.2013.0034
- Price, J. M., & Dodge, K. A. (1989). Reactive and proactive aggression in childhood: Relations to peer status and social context dimensions. *Journal of Abnormal Child Psychology*, 17(4), 455–471. doi:10.1007/BF00915038
- Raley, S., & Bianchi, S. (2006). Sons, daughters, and family processes: Does gender of children matter? *Annual Review of Sociology*, 32, 401–421. doi:10.1146/annurev.soc.32.061604.123106
- Raskauskas, J., & Stoltz, A. D. (2007). Involvement in traditional and electronic bullying among adolescents. *Developmental Psychology*, 43(3), 564–575. doi:10.1037/0012-1649.43.3.564
- Reddy, S. P., James, S., Sewpaul, R., Koopman, F., Funani, N. I., Sifunda, S., ... Omardien, R.G. (2010). *Umthente Uhlaba Usamila – The 2nd South African National Youth Risk Behaviour Survey 2008*. Cape Town: South African Medical Research Council.
- Reddy, S. P., James, S., Sewpaul, R., Sifunda, S., Ellahebokus, A., Kambaran, N. S., & Omardien, R.G. (2013). *Umthente Uhlaba Usamila – The 3rd South African National Youth Risk Behaviour Survey 2011*. Cape Town: South African Medical Research Council.
- Reddy, S. P., Panday, S., Swart, D., Jinabhai, C. C., Amosun, S. L., James S, ... Van den Borne, H. W. (2003) *Umthente Uhlaba Usamila – The 1st South African National Youth Risk Behaviour Survey 2002*. Cape Town: South African Medical Research Council.
- Reijntjes, A., Kamphuis, J. H., Prinzie, P., Boelen, P. A., Van der Schoot, M., & Telch, M. J. (2011). Prospective linkages between peer victimization and externalizing problems in children: A meta-analysis. *Aggressive Behavior*, 37(3), 215–222. doi:10.1002/ab.20374

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Reitman, D., & Asseff, J. (2010). Parenting practices and their relation to anxiety in young adulthood. *Journal of Anxiety Disorders, 24*(6), 565–572. doi:10.1016/j.janxdis.2010.03.016
- Reitz, E., Deković, M., & Meijer, A. M. (2006). Relations between parenting and externalizing and internalizing problem behaviour in early adolescence: Child behaviour as moderator and predictor. *Journal of Adolescence, 29*(3), 419–436. doi:10.1016/j.adolescence.2005.08.003
- Rew, L., Principe, C., & Hannah, D. (2012). Changes in stress and coping during late childhood and preadolescence. *Journal of Child and Adolescent Psychiatric Nursing, 25*(3), 130–140. doi:10.1111/j.1744-6171.2012.00336.x
- Rice, E., Petering, R., Rhoades, H., Winetrobe, H., Goldbach, J., Plant, A., ... Kordic, T. (2015). Cyberbullying perpetration and victimization among middle-school students. *American Journal of Public Health, 105*(3), e66–e72. doi:10.2105/AJPH.2014.302393
- Rigby, K. (1997). What children tell us about bullying in schools. *Children Australia, 22*(2), 28–34. doi:10.1017/S1035077200008178
- Rigby, K. (2005). Why do some children bully at school? The contributions of negative attitudes towards victims and the perceived expectations of friends, parents and teachers. *School Psychology International, 26*(2), 147–161. doi:10.1177/0143034305052910
- Rigby, K. (2006). Implications of bullying in schools for aggression between nations. *Journal of Peace Education, 3*(2), 175–185. doi:10.1080/17400200600874800
- Rigby, K., & Smith, P. K. (2011). Is school bullying really on the rise? *Social Psychology of Education, 14*(4), 441–455. doi:10.1007/s11218-011-9158-y
- Rivers, I., & Smith, P. K. (1994). Types of bullying behaviour and their correlates. *Aggressive Behavior, 20*(5), 359–368. doi:10.1002/1098-2337(1994)20:5<359::AID-AB2480200503>3.0.CO;2-J
- Roberts, W. B. (Jr.), & Morotti, A. A. (2000). The bully as victim: Understanding bully behaviors to increase the effectiveness of interventions in the bully victim dyad.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Professional School Counseling*, 4(2), 148–155. Retrieved from <http://www.jstor.org/journal/profschocoun>
- Robins, R. W., & Trzesniewski, K. H. (2005). Self-esteem development across the life span. *Current Directions in Psychological Science*, 14(3), 158–162. doi:10.1111/j.0963-7214.2005.00353.x
- Robson, C., & Witenberg, R. T. (2013). The influence of moral disengagement, morally based self-esteem, age, and gender on traditional bullying and cyberbullying. *Journal of School Violence*, 12(2), 211–231. doi:10.1080/15388220.2012.762921
- Roche, K. M., Ahmed, S., & Blum, R. W. (2008). Enduring consequences of parenting for risk behaviors from adolescence into early adulthood. *Social Science & Medicine*, 66(9), 2023–2034. doi:10.1016/j.socscimed.2008.01.009
- Rohner, R. P. (2004). The parental “acceptance-rejection syndrome”: Universal correlates of perceived rejection. *American Psychologist*, 59(8), 830–840. doi:10.1037/0003-066X.59.8.830
- Rohner, R. P., & Khaleque, A. (2010). Testing central postulates of parental acceptance-rejection theory (PARTheory): A meta-analysis of cross-cultural studies. *Journal of Family Theory & Review*, 2(1), 73–87. doi:10.1111/j.1756-2589.2010.00040.x
- Rohner, R. P., Khaleque, A., & Cournoyer, D. E. (2012). *Introduction to parental acceptance-rejection theory, methods, evidence, and implications*. Retrieved from <http://csiar.uconn.edu/wp-content/uploads/sites/494/2014/02/INTRODUCTION-TO-PARENTAL-ACCEPTANCE-3-27-12.pdf>
- Rose, B. M., Holmbeck, G. N., Coakley, R. M., & Franks, E. A. (2004). Mediator and moderator effects in developmental and behavioral pediatric research. *Journal of Developmental & Behavioral Pediatrics*, 25(1), 58–67. doi:10.1097/00004703-200402000-00013
- Rosen, P. J., Milich, R., & Harris, M. J. (2007). Victims of their own cognitions: Implicit social cognitions, emotional distress, and peer victimization. *Journal of Applied Developmental Psychology*, 28(3), 211–226. doi: 10.1016/j.appdev.2007.02.001

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Roskam, I., Meunier, J.-C., & Stievenart, M. (2011). Parent attachment, childrearing behavior, and child attachment: Mediated effects predicting preschoolers' externalizing behavior. *Journal of Applied Developmental Psychology, 32*(4), 170–179. doi:10.1016/j.appdev.2011.03.003
- Ruble, D. N., Martin, C. L., & Berenbaum, S. A. (2006). Gender development. In N. Eisenberg (Vol. Ed), W. Damon, & R. M. Lerner (Series Eds.), *Handbook of child psychology, Volume 3: Social, emotional, and personality development* (6th ed., pp. 858–932) [Google Books version]. Retrieved from https://books.google.co.za/books?id=sg4Qr7qZrXYC&printsec=frontcover&dq=Handbook+of+child+psychology:+Social,+emotional,+and+personality+development&hl=en&sa=X&ved=0ahUKEwiC5b6_nM7TAhViF8AKHcsxAQEQ6AEIJTAA#v=onepage&q=Handbook%20of%20child%20psychology%3A%20Social%2C%20emotional%2C%20and%20personality%20development&f=false
- Rutter, M., & Sroufe, L. A. (2000). Developmental psychopathology: Concepts and challenges. *Development and Psychopathology, 12*(3), 265–296. doi:10.1017/S0954579400003023
- Saarento, S., Garandeau, C. F., & Salmivalli, C. (2015). Classroom- and school-level contributions to bullying and victimization: A review. *Journal of Community & Applied Social Psychology, 25*(3), 204–218. doi:10.1002/casp.2207
- Salaam, B., & Mounts, N. S. (2016). International note: Maternal warmth, behavioral control, and psychological control: Relations to adjustment of Ghanaian early adolescents. *Journal of Adolescence, 49*, 99–104. doi:10.1016/j.adolescence.2016.03.006
- Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior, 22*(1), 1–15. doi:10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T
- Sangalang, C. C., Tran, A. G. T. T., Ayers, S. L., & Marsiglia, F. F. (2016). Bullying among urban Mexican-heritage youth: Exploring risk for substance use by status as a bully, victim, and bully-victim. *Children and Youth Services Review, 61*, 216–221. doi:10.1016/j.childyouth.2015.12.019

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Santamaría, C., Tse, P. P., Moreno-Ríos, S., & García-Madruga, J. A. (2013). Deductive reasoning and metalogical knowledge in preadolescence: A mental model appraisal. *Journal of Cognitive Psychology, 25*(2), 192–200. doi:10.1080/20445911.2012.743988
- Sapouna, M., Wolke, D., Vannini, N., Watson, S., Woods, S., Schneider, W., ... Aylett, R. (2012). Individual and social network predictors of the short-term stability of bullying victimization in the United Kingdom and Germany. *British Journal of Educational Psychology, 82*(2), 225–240. doi:10.1111/j.2044-8279.2011.02022.x
- Sarıtaş, D., Grusec, J. E., & Gençöz, T. (2013). Warm and harsh parenting as mediators of the relation between maternal and adolescent emotion regulation. *Journal of Adolescence, 36*(6), 1093–1101. doi:10.1016/j.adolescence.2013.08.015
- Schaefer, E. S. (1959). A circumplex model for maternal behavior. *Journal of Abnormal and Social Psychology, 59*(2), 226–235. doi:10.1037/h0041114
- Schaefer, E. S. (1965a). Children's Reports of Parental Behavior: An inventory. *Child Development, 36*(2), 413–424. doi:10.2307/1126465
- Schaefer, E. S. (1965b). A configurational analysis of children's reports of parent behaviour. *Journal of Consulting Psychology, 29*(6), 552–557. doi:10.1037/h0022702
- Scharf, M., & Mayseless, O. (2007). Putting eggs in more than one basket: A new look at developmental processes of attachment in adolescence. *New Directions for Child and Adolescent Development, 2007*(117), 1–22. doi:10.1002/cd.191
- Scheithauer, H., Hayer, T., Petermann, F., & Jugert, G. (2006). Physical, verbal, and relational forms of bullying among German students: Age trends, gender differences, and correlates. *Aggressive Behavior, 32*(3), 261–275. doi:10.1002/ab.20128
- Schludermann, E., & Schludermann, S. (1970). Replicability of factors in Children's Report of Parent Behavior (CRPBI). *The Journal of Psychology, 76*(2), 239–249. doi:10.1080/00223980.1970.9916845
- Schludermann, S., & Schludermann, E. (1988). Questionnaire for Children and Youth (CRPBI-30). Winnipeg: University of Manitoba.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Schneider, S. K., O'Donnell, L., & Smith, E. (2015). Trends in cyberbullying and school bullying victimization in a regional census of high school students, 2006-2012. *Journal of School Health, 85*(9), 611–620. doi:10.1111/josh.12290
- Scholte, R., Sentse, M., & Granic, I. (2010). Do actions speak louder than words? Classroom attitudes and behavior in relation to bullying in early adolescence. *Journal of Clinical Child & Adolescent Psychology, 39*(6), 789–799. doi:10.1080/15374416.2010.517161
- Scholtz, B., Van Turha, T., & Johnston, K. (2015). Internet visibility and cyberbullying: A survey of Cape Town high school students. *The African Journal of Information and Communication, (15)*, 93–104. doi:10.23962/10539/20333
- Schore, A. N. (2002). Dysregulation of the right brain: A fundamental mechanism of traumatic attachment and the psychopathogenesis of posttraumatic stress disorder. *Australian & New Zealand Journal of Psychiatry, 36*(1), 9–30. doi: 10.1046/j.1440-1614.2002.00996.x
- Schultze-Krumbholz, A., Göbel, K., Scheithauer, H., Brighi, A., Guarini, A., Tsorbatzoudis, H., ... Smith, P. K. (2015). A comparison of classification approaches for cyberbullying and traditional bullying using data from six European countries. *Journal of School Violence, 14*(1), 47–65. doi:10.1080/15388220.2014.961067
- Schwarz, J. C., Barton-Henry, M. L., & Pruzinsky, T. (1985). Assessing child-rearing behaviors: A comparison of ratings made by mother, father, child, and sibling on the CRPBI. *Child Development, 56*(2), 462–479. doi:10.2307/1129734
- Scott, L. N., Whalen, D. J., Zalewski, M., Beeney, J. E., Pilkonis, P. A., Hipwell, A. E., & Stepp, S. D. (2013). Predictors and consequences of developmental changes in adolescent girls' self-reported quality of attachment to their primary caregiver. *Journal of Adolescence, 36*(5), 797–806. doi:10.1016/j.adolescence.2013.06.005
- Scott, S., Briskman, J., Woolgar, M., Humayun, S., & O'Connor, T. G. (2011). Attachment in adolescence: Overlap with parenting and unique prediction of behavioural adjustment. *Journal of Child Psychology and Psychiatry, 52*(10), 1052–1062. doi:10.1111/j.1469-7610.2011.02453.x

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Selkie, E. M., Fales, J. L., & Moreno, M. A. (2016). Cyberbullying prevalence among US middle and high school-aged adolescents: A systematic review and quality assessment. *Journal of Adolescent Health, 58*(2), 125–133. doi:10.1016/j.jadohealth.2015.09.026
- Sercombe, H., & Donnelly, B. (2013). Bullying and agency: Definition, intervention and ethics. *Journal of Youth Studies, 16*(4), 491–502. doi:10.1080/13676261.2012.725834
- Shaffer, A., Lindhiem, O., Kolko, D. J., & Trentacosta, C. J. (2013). Bidirectional relations between parenting practices and child externalizing behavior: A cross-lagged panel analysis in the context of a psychosocial treatment and 3-year follow-up. *Journal of Abnormal Child Psychology, 41*(2), 199–210. doi:10.1007/s10802-012-9670-3
- Shakoor, S., Jaffee, S. R., Bowes, L., Ouellet-Morin, I., Andreou, P., Happé, F., ... Arseneault, L. (2012). A prospective longitudinal study of children's theory of mind and adolescent involvement in bullying. *Journal of Child Psychology and Psychiatry, 53*(3), 254–261. doi:10.1111/j.1469-7610.2011.02488.x
- Shapka, J. D., & Law, D. M. (2013). Does one size fit all? Ethnic differences in parenting behaviors and motivations for adolescent engagement in cyberbullying. *Journal of Youth and Adolescence, 42*(5), 723–738. doi:10.1007/s10964-013-9928-2
- Sharkey, J. D., Ruderman, M. A., Mayworm, A. M., Green, J. G., Furlong, M. J., Rivera, N., & Purisch, L. (2015). Psychosocial functioning of bullied youth who adopt versus deny the bully-victim label. *School Psychology Quarterly, 30*(1), 91–104. doi:10.1037/spq0000077
- Shaver, P. R., & Mikulincer, M. (2010). New directions in attachment theory and research. *Journal of Social and Personal Relationships, 27*(2), 163–172. doi:10.1177/0265407509360899
- Sheehan, G. & Noller, P. (2002). Adolescent's perceptions of differential parenting: Links with attachment style and adolescent adjustment. *Personal Relationships, 9*(2), 173–190. doi: 10.1111/1475-6811.00011
- Shetgiri, R. (2013). Bullying and victimization among children. *Advances in Pediatrics, 60*(1), 33–51. doi:10.1016/j.yapd.2013.04.004

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Shetgiri, R., Lin, H., Avila, R. M., & Flores, G. (2012). Parental characteristics associated with bullying perpetration in US children aged 10 to 17 years. *American Journal of Public Health, 102*(12), 2280–2286. doi:10.2105/AJPH.2012.300725
- Shetgiri, R., Lin, H., & Flores, G. (2012). Trends in risk and protective factors for child bullying perpetration in the United States. *Child Psychiatry & Human Development, 44*(1), 89–104. doi:10.1007/s10578-012-0312-3
- Shi, L., Wampler, R., & Wampler, K. (2013). A comparison of self-report adult attachment measures: How do they converge and diverge? *Universal Journal of Psychology, 1*(1), 10–19.
- Shomaker, L. B., & Furman, W. (2009). Parent—adolescent relationship qualities, internal working models, and attachment styles as predictors of adolescents' interactions with friends. *Journal of Social and Personal Relationships, 26*(5), 579–603. doi:10.1177/0265407509354441
- Sibanda, A. (2011). Ethnic differences in the living arrangements of children in South Africa. *Journal of Comparative Family Studies, 42*(4), 479–508. Retrieved from <https://soci.ucalgary.ca/jcfs/>
- Sigurdson, J. F., Wallander, J., & Sund, A. M. (2014). Is involvement in school bullying associated with general health and psychosocial adjustment outcomes in adulthood? *Child Abuse & Neglect, 38*(10), 1607–1617. doi:10.1016/j.chiabu.2014.06.001
- Sijtsema, J. J. (2016). Preadolescents and their friends: Similarity in aggression and depressive problems as a function of social status and friendship reciprocity. *International Journal of Behavioral Development, 40*(6), 565–576. doi:10.1177/0165025415607380
- Sijtsema, J. J., Veenstra, R., Lindenberg, S., & Salmivalli, C. (2009). Empirical test of bullies' status goals: Assessing direct goals, aggression, and prestige. *Aggressive Behavior, 35*(1), 57–67. doi:10.1002/ab.20282
- Simmons, R. G., & Blyth, D. A. (2009). *Moving into adolescence: The impact of pubertal change and school context* [Google Books version]. Retrieved from <https://books.google.co.za/books?id=SFtxUdbF3mIC&pg=PA123&lpg=PA123&dq=ge>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

nder+intensification&source=bl&ots=ChwUYD4roE&sig=cKmCFfhBejXzh0cvct-rE0y
KsZY&hl=en&sa=X&ved=0ahUKEwj5wZjOvo3SAhXF0RQKHavnCb84KBD0AQgj
MAI#v=onepage&q=gender intensification&f=false

- Sisk, C. L., & Foster, D. L. (2004). The neural basis of puberty and adolescence. *Nature Neuroscience*, 7(10), 1040–1047. doi: 10.1038/nn1326
- Sittichai, R., & Smith, P. K. (2015). Bullying in South-East Asian countries: A review. *Aggression and Violent Behavior*, 23, 22–35. doi:10.1016/j.avb.2015.06.002
- Skinner, E., Johnson, S., & Snyder, T. (2005). Six dimensions of parenting: A motivational model. *Parenting: Science and Practice*, 5(2), 175–235. doi:10.1207/s15327922par0502_3
- Slonje, R., & Smith, P. K. (2008). Cyberbullying: Another main type of bullying? *Scandinavian Journal of Psychology*, 49(2), 147–154. doi:10.1111/j.1467-9450.2007.00611.x
- Slonje, R., Smith, P. K., & Frisé, A. (2013). The nature of cyberbullying, and strategies for prevention. *Computers in Human Behavior*, 29(1), 26–32. doi:10.1016/j.chb.2012.05.024
- Smit, M. E. (2003). The bully/victim problem in South African primary schools. *Acta Criminologica*, 16(4), 27–33. Retrieved from <http://www.crimsa.ac.za/acta.html>
- Smith, H., Polenik, K., Nakasita, S., & Jones, A. P. (2012). Profiling social, emotional and behavioural difficulties of children involved in direct and indirect bullying behaviours. *Emotional and Behavioural Difficulties*, 17(3–4), 243–257. doi:10.1080/13632752.2012.704315
- Smith, P. K. (2004). Bullying: Recent developments. *Child and Adolescent Mental Health*, 9(3), 98–103. doi:10.1111/j.1475-3588.2004.00089.x
- Smith, P. K. (2011). Bullying in schools: Thirty years of research. In C. P. Monks & I. Coyne (Eds.), *Bullying in different contexts* (pp. 36–60). New York, NY: Cambridge University Press.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Smith, P. K. (2016). Research on bullying in schools in European countries. In P. K. Smith, K. Kwak, & Y. Toda (Eds.), *School bullying in different cultures: Eastern and Western perspectives* (pp. 3–29) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=IRW8CwAAQBAJ&printsec=frontcover&dq=School+bullying+in+different+cultures:+Eastern+and+Western+perspectives&hl=en&sa=X&ved=0ahUKEwioIPan87TAhWqAsAKHW6iDwsQ6AEIJTAA#v=onepage&q=School%20bullying%20in%20different%20cultures%3A%20Eastern%20and%20Western%20perspectives&f=false>
- Smith, P. K., Madsen, K. C., & Moody, J. C. (1999). What causes the age decline in reports of being bullied at school? Towards a developmental analysis of risks of being bullied. *Educational Research, 41*(3), 267–285. doi:10.1080/0013188990410303
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry, 49*(4), 376–385. doi:10.1111/j.1469-7610.2007.01846.x
- Smith, P. K., Thompson, F., & Bhatti, S. (2012). Ethnicity, gender, bullying and cyberbullying in English secondary school pupils. *Studia Edukacyjne, 23*, 7–18. Retrieved from <http://www.staff.amu.edu.pl/~histwych/studedu/>
- Smorti, A., Menesini, E., & Smith, P. K. (2003). Parents' definitions of children's bullying in a five-country comparison. *Journal of Cross-Cultural Psychology, 34*(4), 417–432. doi:10.1177/0022022103034004003
- Soenens, B., Park, S.-Y., Vansteenkiste, M., & Mouratidis, A. (2012). Perceived parental psychological control and adolescent depressive experiences: A cross-cultural study with Belgian and South-Korean adolescents. *Journal of Adolescence, 35*(2), 261–272. doi:10.1016/j.adolescence.2011.05.001
- Soenens, B., & Vansteenkiste, M. (2010). A theoretical upgrade of the concept of parental psychological control: Proposing new insights on the basis of self-determination theory. *Developmental Review, 30*(1), 74–99. doi:10.1016/j.dr.2009.11.001
- Soenens, B., Vansteenkiste, M., Goossens, L., Duriez, B., & Niemiec, C. P. (2008). The intervening role of relational aggression between psychological control and friendship quality. *Social Development, 17*(3), 661–681. doi:10.1111/j.1467-9507.2007.00454.x

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Solberg, M. E., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior, 29*(3), 239–268. doi:10.1002/ab.10047
- Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review, 17*(2), 125–146. doi:10.1007/s10648-005-3950-1
- Spriggs, A. L., Iannotti, R. J., Nansel, T. R., & Haynie, D. L. (2007). Adolescent bullying involvement and perceived family, peer and school relations: Commonalities and differences across race/ethnicity. *Journal of Adolescent Health, 41*(3), 283–293. doi:10.1016/j.jadohealth.2007.04.009
- Stadler, C., Feifel, J., Rohrmann, S., Vermeiren, R., & Poustka, F. (2010). Peer-victimization and mental health problems in adolescents: Are parental and school support protective? *Child Psychiatry & Human Development, 41*(4), 371–386. doi:10.1007/s10578-010-0174-5
- Statistics South Africa (2014). *Poverty trends in South Africa: An examination of absolute poverty between 2006 and 2011. Report No. 03-10-06*. Pretoria: Statistics South Africa.
- Statistics South Africa (2015). *General household survey: Statistical release P0318*. Pretoria: Statistics South Africa.
- Stavrinides, P., Nikiforou, M., & Georgiou, S. (2015). Do mothers know? Longitudinal associations between parental knowledge, bullying, and victimization. *Journal of Social and Personal Relationships, 32*(2), 180–196. doi:10.1177/0265407514525889
- Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In S. Feldman & G. R. Elliot (Eds.), *At the threshold: The developing adolescent* (pp. 255–276). Cambridge, MA: Harvard University Press.
- Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., & Dornbusch, S. M. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 65*(3), 754–770. doi:10.2307/1131416

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development, 63*(5), 1266–1281. doi:10.2307/1131532
- Steyn, H. S. (1999). *Praktiese beduidendheid: Die gebruik van effekgroottes*. Potchefstroom: Publication Control Committee, North-West University.
- Stoltz, S., Van Londen, M., Deković, M., Prinzie, P., De Castro, B. O., & Lochman, J. E. (2013). Simultaneously testing parenting and social cognitions in children at-risk for aggressive behavior problems: Sex differences and ethnic similarities. *Journal of Child and Family Studies, 22*(7), 922–931. doi:10.1007/s10826-012-9651-8
- Strumpher, J., & Wannenburg, I. (2014). Adolescent girls' experiences of being bullied in a secondary school environment. *Child Abuse Research in South Africa, 15*(2), 62–71. Retrieved from <http://www.sapsac.co.za/carsa.html>
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior, 7*(3), 321–326. doi:10.1089/1094931041291295
- Sutton, J., Smith, P. K., & Swettenham, J. (1999). Social cognition and bullying: Social inadequacy or skilled manipulation? *British Journal of Developmental Psychology, 17*(3), 435–450. doi:10.1348/026151099165384
- Tambelli, R., Laghi, F., Odorisio, F., & Notari, V. (2012). Attachment relationships and internalizing and externalizing problems among Italian adolescents. *Children and Youth Services Review, 34*(8), 1465–1471. doi:10.1016/j.childyouth.2012.04.004
- Tanrikulu, I., & Campbell, M. (2015). Correlates of traditional bullying and cyberbullying perpetration among Australian students. *Children and Youth Services Review, 55*, 138–146. doi:10.1016/j.childyouth.2015.06.001
- Tarablus, T., Heiman, T., & Olenik-Shemesh, D. (2015). Cyber bullying among teenagers in Israel: An examination of cyber bullying, traditional bullying, and socioemotional functioning. *Journal of Aggression, Maltreatment & Trauma, 24*(6), 707–720. doi:10.1080/10926771.2015.1049763

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Tattum, D. (1997). A whole-school response: From crisis management to prevention. *The Irish Journal of Psychology, 18*(2), 221–232. doi:10.1080/03033910.1997.10558141
- Thomas, H. J., Chan, G. C. K., Scott, J. G., Connor, J. P., Kelly, A. B., & Williams, J. (2016). Association of different forms of bullying victimisation with adolescents' psychological distress and reduced emotional wellbeing. *Australian & New Zealand Journal of Psychiatry, 50*(4), 371–379. doi:10.1177/0004867415600076
- Thomas, H. J., Connor, J. P., & Scott, J. G. (2015). Integrating traditional bullying and cyberbullying: Challenges of definition and measurement in adolescents – A review. *Educational Psychology Review, 27*(1), 135–152. doi:10.1007/s10648-014-9261-7
- Thornberg, R. (2010). Schoolchildren's social representations on bullying causes. *Psychology in the Schools, 47*(4), 311–327. doi:10.1002/pits.20472
- Thornberg, R. (2015). The social dynamics of school bullying: The necessary dialogue between the blind men around the elephant and the possible meeting point at the socialecological square. *Confero: Essays on Education, Philosophy and Politics, 3*(2), 161–203. doi:10.3384/confero.2001-4562.1506245
- Tippett, N., Wolke, D., & Platt, L. (2013). Ethnicity and bullying involvement in a national UK youth sample. *Journal of Adolescence, 36*(4), 639–649. doi:10.1016/j.adolescence.2013.03.013
- Tom, S. R., Schwartz, D., Chang, L., Farver, J. A. M., & Xu, Y. (2010). Correlates of victimization in Hong Kong children's peer groups. *Journal of Applied Developmental Psychology, 31*(1), 27–37. doi:10.1016/j.appdev.2009.06.002
- Tomlinson, M., Cooper, P., & Murray, L. (2005). The mother-infant relationship and infant attachment in a South African peri-urban settlement. *Child Development, 76*(5), 1044–1054. doi:10.1111/j.1467-8624.2005.00896.x
- Topcu, Ç., Yıldırım, A., & Erdur-Baker, Ö. (2013). Cyber bullying @ schools: What do Turkish adolescents think? *International Journal for the Advancement of Counselling, 35*(2), 139–151. doi:10.1007/s10447-012-9173-5

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Toth, S. L., & Cicchetti, D. (2010). The historical origins and developmental pathways of the discipline of developmental psychopathology. *The Israel Journal of Psychiatry and Related Sciences*, 47(2), 95–104. Retrieved from <https://www.ncbi.nlm.nih.gov/labs/journals/isr-j-psychiatry-relat-sci/>
- Townsend, L., Flisher, A. J., Chikobvu, P., Lombard, C., & King, G. (2008). The relationship between bullying behaviours and high school dropout in Cape Town, South Africa. *South African Journal of Psychology*, 38(1), 21–32. doi:10.1177/008124630803800102
- Ttofi, M. M., Farrington, D. P., & Lösel, F. (2012). School bullying as a predictor of violence later in life: A systematic review and meta-analysis of prospective longitudinal studies. *Aggression and Violent Behavior*, 17(5), 405–418. doi:10.1016/j.avb.2012.05.002
- Tustin, D. H., Zulu, G. N., & Basson, A. (2014). Bullying among secondary school learners in South Africa with specific emphasis on cyber bullying. *Child Abuse Research in South Africa*, 15(2), 13–25. Retrieved from <http://www.sapsac.co.za/carsa.html>
- Ucanok, Z., Smith, P. K., & Karasoy, D. S. (2011). Definitions of bullying: Age and sex differences in a Turkish sample. *Asian Journal of Social Psychology*, 14(1), 75–83. doi:10.1111/j.1467-839X.2010.01334.x
- Udris, R. (2014). Cyberbullying among high school students in Japan: Development and validation of the Online Disinhibition Scale. *Computers in Human Behavior*, 41, 253–261. doi:10.1016/j.chb.2014.09.036
- Van Dyk, G. A. J., & De Kock, F. S. (2004). The relevance of the individualism – collectivism (IC) factor for the management of diversity in the South African National Defence Force. *SA Journal of Industrial Psychology*, 30(2), 90–95. doi:10.4102/sajip.v30i2.155
- Van Ijzendoorn, M. H., & Sagi-Schwartz, A. (2008). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed.) [Google Books version]. Retrieved from <https://books.google.co.za/books?id=DMEdpkw9yREC&printsec=frontcover&dq=Handbook+of+attachment:+Theory,+research,+and+clinical+applications&hl=en&sa=X&ved=0ahUKEwj4ZuyvOfQAhXBJMAKHZLTBb0Q6AEIGDA#v=onepage&q=chapter 37&f=false>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Vandebosch, H., & Van Cleemput, K. (2008). Defining cyberbullying: A qualitative research into the perceptions of youngsters. *Cyberpsychology & Behavior, 11*(4), 499–503. doi:10.1089/cpb.2007.0042
- Vanderbilt-Adriance, E., & Shaw, D. S. (2008). Protective factors and the development of resilience in the context of neighborhood disadvantage. *Journal of Abnormal Child Psychology, 36*(6), 887–901. doi:10.1007/s10802-008-9220-1
- Varjas, K., Meyers, J., Bellmoff, L., Lopp, E., Birckbichler, L., & Marshall, M. (2008). Missing voices: Fourth through eighth grade urban students' perceptions of bullying. *Journal of School Violence, 7*(4), 97–118. doi:10.1080/15388220801973912
- Vaughn, M. G., Fu, Q., Bender, K., DeLisi, M., Beaver, K. M., Perron, B. E., & Howard, M. O. (2010). Psychiatric correlates of bullying in the United States: Findings from a national sample. *Psychiatric Quarterly, 81*(3), 183–195. doi:10.1007/s11126-010-9128-0
- Veenstra, R., Lindenberg, S., Oldehinkel, A. J., De Winter, A. F., Verhulst, F. C., & Ormel, J. (2005). Bullying and victimization in elementary schools: A comparison of bullies, victims, bully/victims, and uninvolved preadolescents. *Developmental Psychology, 41*(4), 672–682. doi:10.1037/0012-1649.41.4.672
- Vervoort, M. H. M., Scholte, R. H. J., & Overbeek, G. (2010). Bullying and victimization among adolescents: The role of ethnicity and ethnic composition of school class. *Journal of Youth and Adolescence, 39*(1), 1–11. doi:10.1007/s10964-008-9355-y
- Vieno, A., Gini, G., & Santinello, M. (2011). Different forms of bullying and their association to smoking and drinking behavior in Italian adolescents. *Journal of School Health, 81*(7), 393–399. doi:10.1111/j.1746-1561.2011.00607.x
- Vivolo-Kantor, A. M., Martell, B. N., Holland, K. M., & Westby, R. (2014). A systematic review and content analysis of bullying and cyber-bullying measurement strategies. *Aggression and Violent Behavior, 19*(4), 423–434. doi:10.1016/j.avb.2014.06.008
- Vogt, L., & Laher, S. (2009). The five factor model of personality and individualism / collectivism in South Africa: An exploratory study. *Psychology in Society, 37*, 39–54. Retrieved from <http://www.pins.org.za/>

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Volk, A., Craig, W., Boyce, W., & King, M. (2006). Adolescent risk correlates of bullying and different types of victimization. *International Journal of Adolescent Medicine and Health, 18*(4), 575–586. doi:10.1515/IJAMH.2006.18.4.575
- Volk, A. A., Camilleri, J. A., Dane, A. V., & Marini, Z. A. (2012). Is adolescent bullying an evolutionary adaptation? *Aggressive Behavior, 38*(3), 222–238. doi: 10.1002/ab.21418
- Volk, A. A., Dane, A. V., & Marini, Z. A. (2014). What is bullying? A theoretical redefinition. *Developmental Review, 34*(4), 327–343. doi:10.1016/j.dr.2014.09.001
- Von Marees, N., & Petermann, F. (2010). Bullying in German primary schools: Gender differences, age trends and influence of parents' migration and educational backgrounds. *School Psychology International, 31*(2), 178–198. doi:10.1177/0143034309352416
- Walden, L. M., & Beran, T. N. (2010). Attachment quality and bullying behavior in school-aged youth. *Canadian Journal of School Psychology, 25*(1), 5–18. doi:10.1177/0829573509357046
- Walrave, M., & Heirman, W. (2011). Cyberbullying: Predicting victimisation and perpetration. *Children & Society, 25*(1), 59–72. doi:10.1111/j.1099-0860.2009.00260.x
- Walsh, S., & Cosma, A. (2016). Bullying. In J. Inchley, D. Currie, T. Young, O. Samdal, T. Torsheim, L. Augustson, ... V. Barnekow (Eds.). *Growing up unequal: Gender and socioeconomic differences in young people's health and well-being – Health Behaviour in School-aged Children (HBSC) study: International report from the 2013/2014 survey* (pp. 197–211). Copenhagen: WHO Regional Office for Europe.
- Wang, H. (2014). The relationship between parenting styles and academic and behavioral adjustment among urban Chinese adolescents, *Chinese Sociological Review, 46*(4), 19–40. doi:10.2753/CSA2162-0555460402
- Wang, H., Zhou, X., Lu, C., Wu, J., Deng, X., Hong, L., ... He, Y. (2012). Adolescent bullying involvement and psychosocial aspects of family and school life: A cross-sectional study from Guangdong Province in China. *PLOS ONE, 7*(7), 1–10. doi:10.1371/journal.pone.0038619

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Wang, J., Iannotti, R. J., & Luk, J. W. (2012). Patterns of adolescent bullying behaviors: Physical, verbal, exclusion, rumor, and cyber. *Journal of School Psychology, 50*(4), 521–534. doi:10.1016/j.jsp.2012.03.004
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health, 45*(4), 368–375. doi:10.1016/j.jadohealth.2009.03.021
- Wang, W., Brittain, H., McDougall, P., & Vaillancourt, T. (2016). Bullying and school transition: Context or development? *Child Abuse & Neglect, 51*, 237–248. doi:10.1016/j.chiabu.2015.10.004
- Wei, C., & Kendall, P. C. (2014). Child perceived parenting behavior: Childhood anxiety and related symptoms. *Child & Family Behavior Therapy, 36*(1), 1–18. doi:10.1080/07317107.2014.878175
- Wen, X., & Hui, S. S.-C. (2012). Parenting style as a moderator of the association between parenting behaviors and the weight status of adolescents. *The Journal of Early Adolescence, 32*(2), 252–268. doi:10.1177/0272431610393249
- Werner, N. E. (2012). Do hostile attribution biases in children and parents predict relationally aggressive behavior? *The Journal of Genetic Psychology, 173*(3), 221–245. doi:10.1080/00221325.2011.600357
- WhatsApp. (2017). *WhatsApp Legal Info*. Retrieved from <https://www.whatsapp.com/legal/terms-of-service>
- Wieder, H. (2001). *Programmed for failure: A triptych* [Google Books version]. Retrieved from <https://books.google.co.za/books?id=2WiJwnzga40C&pg=PA59&dq=preadolescence&hl=en&sa=X&ved=0ahUKEwiG8KPauJHRAhUqAsAKHQ3yDGQ4FBD0AQgwMAY#v=onepage&q=preadolescence&f=false>
- Wigfield, A., Lutz, S., & Wagner, A. L. (2005). Early adolescents' development across the middle school years: Implications for school counselors. *Professional School Counseling, 9*(2), 112–119. doi:10.5330/prsc.9.2.2484n0j255vpm302

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Willard, N. E. (2007). *Cyberbullying and cyberthreats: Responding to the challenge of online social aggression, threats, and distress* [Google Books version]. Retrieved from <https://books.google.co.za/books?id=VyTdG2BTnl4C&printsec=frontcover&dq=Cyberbullying+and+cyberthreats:+Responding+to+the+challenge+of+online+social+aggression,+threats,+and+distress.&hl=en&sa=X&ved=0ahUKEwiVrtewqqHUAhUMJ8AKHQpdAvIQ6AEIIDA#v=onepage&q=Cyberbullying%20and%20cyberthreats%3A%20Responding%20to%20the%20challenge%20of%20online%20social%20aggression%2C%20threats%2C%20and%20distress.&f=false>
- Williams, K., & Kennedy, J. H. (2012). Bullying behaviors and attachment styles. *North American Journal of Psychology, 14*(2), 321–338. Retrieved from <http://najp.us/>
- Williford, A., Boulton, A. J., Forrest-Bank, S. S., Bender, K. A., Dieterich, W. A., & Jenson, J. M. (2016). The effect of bullying and victimization on cognitive empathy development during the transition to middle school. *Child & Youth Care Forum, 45*(4), 525–541. doi:10.1007/s10566-015-9343-9
- Williford, A., Boulton, A. J., & Jenson, J. M. (2014). Transitions between subclasses of bullying and victimization when entering middle school. *Aggressive Behavior, 40*(1), 24–41. doi:10.1002/ab.21503
- Williford, A. P., Brisson, D., Bender, K. A., Jenson, J. M., & Forrest-Bank, S. (2011). Patterns of aggressive behavior and peer victimization from childhood to early adolescence: A latent class analysis. *Journal of Youth and Adolescence, 40*(6), 644–655. doi:10.1007/s10964-010-9583-9
- Wilson, J. M., & Wilkinson, R. B. (2012). The self-report assessment of adolescent attachment: A systematic review and critique. *Journal of Relationships Research, 3*, 81–94. doi: 10.1017/jrr.2012.7
- Wilson, M. L., Celedonia, K. L., & Kamala, B. A. (2013). Patterns, characteristics, and correlates of adolescent bully-victims in urban Tanzania. *Social Sciences, 2*(4), 234–246. doi:10.3390/socsci2040234
- Windle, M., Brener, N., Cuccaro, P., Dittus, P., Kanouse, D. E., Murray, N., ... Schuster, M. A. (2010). Parenting predictors of early-adolescents' health behaviors: Simultaneous

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- group comparisons across sex and ethnic groups. *Journal of Youth and Adolescence*, 39(6), 594–606. doi:10.1007/s10964-009-9414-z
- Wingate, V. S., Minney, J. A., & Guadagno, R. E. (2013). Sticks and stones may break your bones, but words will always hurt you: A review of cyberbullying. *Social Influence*, 8(2–3), 87–106. doi:10.1080/15534510.2012.730491
- Winsper, C., Lereya, T., Zanarini, M., & Wolke, D. (2012). Involvement in bullying and suicide-related behavior at 11 years: A prospective birth cohort study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(3), 271–282. doi:10.1016/j.jaac.2012.01.001
- Witherow, T. (2017, January 17). Boy, 13, becomes the third pupil at a school embroiled in a 'bullying' row to be found dead in a year as mother calls for an investigation. *Daily Mail*. Retrieved from <http://www.dailymail.co.uk/news/article-4127536/Third-schoolboy-embroiled-bullying-row-dead.html>
- Wolfe, D. A., & McIsaac, C. (2011). Distinguishing between poor/dysfunctional parenting and child emotional maltreatment. *Child Abuse & Neglect*, 35(10), 802–813. doi:10.1016/j.chiabu.2010.12.009
- Wong, D. S. W., Chan, H. C., & Cheng, C. H. K. (2014). Cyberbullying perpetration and victimization among adolescents in Hong Kong. *Children and Youth Services Review*, 36, 133–140. doi:10.1016/j.childyouth.2013.11.006
- Wu, A. D., & Zumbo, B. D. (2008). Understanding and using mediators and moderators. *Social Indicators Research*, 87(3), 367–392. doi:10.1007/s11205-007-9143-1
- Wu, J., He, Y., Lu, C., Deng, X., Gao, X., Guo, L., ... Zhou, Y. (2015). Bullying behaviors among Chinese school-aged youth: A prevalence and correlates study in Guangdong Province. *Psychiatry Research*, 225(3), 716–722. doi:10.1016/j.psychres.2014.11.004
- Yang, S., Lu, Y., Wang, B., & Zhao, L. (2014). The benefits and dangers of flow experience in high school students' Internet usage: The role of parental support. *Computers in Human Behavior*, 41, 504–513. doi:10.1016/j.chb.2014.09.039

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Yang, S.-J., Stewart, R., Kim, J.-M., Kim, S.-W., Shin, I.-S., Dewey, M. E., ... Yoon, J.-S. (2013). Differences in predictors of traditional and cyber-bullying: A 2-year longitudinal study in Korean school children. *European Child & Adolescent Psychiatry*, 22(5), 309–318. doi:10.1007/s00787-012-0374-6
- Ybarra, M. L., Espelage, D. L., & Mitchell, K. J. (2014). Differentiating youth who are bullied from other victims of peer-aggression: The importance of differential power and repetition. *Journal of Adolescent Health*, 55(2), 293–300. doi:10.1016/j.jadohealth.2014.02.009
- Ybarra, M. L., & Mitchell, K. J. (2004). Youth engaging in online harassment: Associations with caregiver–child relationships, Internet use, and personal characteristics. *Journal of Adolescence*, 27(3), 319–336. doi:10.1016/j.adolescence.2004.03.007
- Yen, C.-F., Huang, M.-F., Kim, Y. S., Wang, P.-W., Tang, T.-C., Yeh, Y.-C., ... Yang, P. (2013). Association between types of involvement in school bullying and different dimensions of anxiety symptoms and the moderating effects of age and gender in Taiwanese adolescents. *Child Abuse & Neglect*, 37(4), 263–272. doi:10.1016/j.chiabu.2013.01.004
- Yeung, R. S., & Leadbeater, B. J. (2007). Does hostile attributional bias for relational provocations mediate the short-term association between relational victimization and aggression in preadolescence? *Journal of Youth and Adolescence*, 36(8), 973–983. doi:10.1007/s10964-006-9162-2
- You, S., Lee, J., Lee, Y., & Kim, A. Y. (2015). Bullying among Korean adolescents: The role of empathy and attachment. *Psychology in the Schools*, 52(6), 594–606. doi:10.1002/pits.21842
- You, S., & Lim, S. A. (2016). Longitudinal predictors of cyberbullying perpetration: Evidence from Korean middle school students. *Personality and Individual Differences*, 89, 172–176. doi:10.1016/j.paid.2015.10.019
- Youth Research Unit (YRU) (2012). *Nature, extent and impact of bullying among secondary school learners in Gauteng*. Bureau of Market Research, UNISA, Pretoria.

BULLYING, PERCEIVED PARENTING, AND ATTACHMENT

- Yuwen, W., & Chen, A. C. C. (2013). Chinese American adolescents: Perceived parenting styles and adolescents' psychosocial health. *International Nursing Review*, *60*(2), 236–243. doi:10.1111/inr.12002
- Zahn-Waxler, C., Crick, N. R., Shirtcliff, E. A., & Woods, K. E. (2006). The origins and development of psychopathology in females and males. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (2nd ed., Vol. 1, pp. 76–138) [Google Books version]. Retrieved from https://books.google.co.za/books?id=kNQ A8r5zcVcC&printsec=frontcover&dq=Developmental+psychopathology:+Theory+and+method&hl=en&sa=X&ved=0ahUKEwj_p8_PI87TAhVLAcAKHYeUB9kQ6AEIJTA A#v=onepage&q=Developmental%20psychopathology%3A%20Theory%20and%20method&f=false
- Zaslow, M. J., Weinfield, N. S., Gallagher, M., Hair, E. C., Ogawa, J. R., Egeland, B., ... De Temple, J. M. (2006). Longitudinal prediction of child outcomes from differing measures of parenting in a low-income sample. *Developmental Psychology*, *42*(1), 27–37. doi:10.1037/0012-1649.42.1.27
- Zhou, Z., Tang, H., Tian, Y., Wei, H., Zhang, F., & Morrison, C. M. (2013). Cyberbullying and its risk factors among Chinese high school students. *School Psychology International*, *34*(6), 630–647. doi:10.1177/0143034313479692
- Zimmer-Gembeck, M., J., Webb, H. J., Pepping, C. A., Swan, K., Merlo, O., Skinner, E. A., Avdagic, E., & Dunbar, M. (2015). Review: Is parent–child attachment a correlate of children's emotion regulation and coping? *International Journal of Behavioral Development*, *41*(1), 1–20. doi: 10.1177/0165025415618276
- Ziv, Y., Leibovich, I., & Shechtman, Z. (2013). Bullying and victimization in early adolescence: Relations to social information processing patterns. *Aggressive Behavior*, *39*(6), 482–492. doi:10.1002/ab.21494
- Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015). Systematic review of theoretical studies on bullying and cyberbullying: Facts, knowledge, prevention, and intervention. *Aggression and Violent Behavior*, *23*, 1–21. doi:10.1016/j.avb.2015.10.001