

**ATTACHMENT AND ITS ASSOCIATION TO EXTERNALIZING AND
INTERNALIZING BEHAVIOURS AMONGST
SCHOOL-AGED CHILDREN IN MANKWENG, POLOKWANE**

BY

NTHABISENG PHILLIPINE RAMOLOTO

MINI-DISSERTATION

Submitted in partial fulfillment of the requirements of the degree

Master of Arts in Clinical Psychology

in the

**FACULTY OF HUMANITIES
(SCHOOL OF SOCIAL SCIENCES)**

2 AM
[Redacted]

at the

**UNIVERSITY OF LIMPOPO
(TURFLOOP CAMPUS)**

T 15011

SUPERVISOR: PROF S. MASHEGOANE

CO-SUPERVISOR: DR S. MORIPE

[Redacted]

318
[Redacted]

Declaration

I declare that the mini-dissertation hereby submitted to the University of Limpopo, for the degree of MA in Clinical Psychology has not previously been submitted by me for a degree at this or any other university; that it is my work in design and execution, and that all material contained herein has been duly acknowledged.

N.P. Remaloto.
Initials & Surname

04/09/2013
Date:

Acknowledgements

My sincere thanks go to the following:

God, for His endless blessings to me. I did nothing to deserve it, yet I am surrounded by His splendour. I want to thank Him for giving me the strength and wisdom to finish this project. Without Him I would not have come this far. *Thank You Lord.*

Prof. S Mashegoane, my supervisor, for his never ending patience, inspired ideas and guidance throughout this project. His firm, to the point expression and expertise in providing advice never went unnoticed. *God bless you.*

Dr. S Moripe, my co-supervisor for support and encouragement. *Thank you so much.*

My husband and soul-mate, Daniel Matsetsebane Mashiane, for his love, understanding, support and encouragement to persevere. Your unfailing belief in me never went unnoticed. *Ke a leboga morwa wa di-Tolu, modimo a go godiše.*

My son, Morongoa Mashiane, for his love and understanding. *Ke a leboga Ngoato.*

My mother (Kabidi Rebecca Ramoloto), brother (Harries Patla Ramoloto), and sister (Julia Maseja Ramoloto), thank you for being supportive since the beginning, for understanding the challenges that come with professional training and believing in me all the time. It is your enduring strength, love, support, morality and wisdom that made everything possible for me. May God bless you with many days to come. *Ke a leboga Mogalemosadi, Mokone le Mosebjadi.*

I cannot end this without mentioning people who continued to support and believe in me: my maternal grandparents (Mamohlake Calvin Mojapelo, Melida Mashadi Mojapelo); my role model uncle (Abram Mathokga Mojapelo); my aunts and their respective families (Khutela, Mogaladi, Mokuru, Mamohlake, Mosima, Thamagane, Bogobjana, Malesela and Modudu). *Ke a leboga Bakone, le Bahlalerwa.*

AM Leshabane, for statistical consultation in this project.

The Limpopo Provincial Government Department of Basic Education and the schools that participated for allowing me access to participants and their respective guardians.

To the participants who willingly participated in this study. Without you there would have been no study.

Abstract

There is a considerable literature linking aspects of internalizing and externalizing behaviours with attachment. One hundred and thirty five primary school children participated in a study of attachment assessed with Experiences in Close Relationships Scale-Revised for use with Children and Adolescents (ECR-RC; Brenning, Soenens, Braet, & Bosmans, 2011), and internalizing and externalizing behaviours assessed with the parent form of the Pediatric Symptom Checklist (PSC, Jellinek, Murphy, Robinson, Feins, Lamb, & Fenton, 1988) and its youth version (PSC-Y, Jellinek, Murphy, & Burns, 1986). Externalizing behaviours could not be predicted from learners' attachment pattern. However, there was a relationship between avoidance and internalizing behaviours. The results are discussed within existing attachment and problem behaviour literature.

Key words: Attachment, internalizing behaviour, externalizing behaviour.

Table of Contents

Contents	Page No
Declaration.....	ii
Dedication.....	iii
Acknowledgements.....	iv
Abstract.....	vi
Table of contents.....	vii
List of tables.....	x
 CHAPTER 1: Introduction	
1.1 Introduction.....	1
1.2 Statement of the problem.....	1
1.3 Motivation for the study.....	2
1.4 Aim of the study.....	3
1.5 Objectives of the study.....	4
1.6.1 Hypotheses.....	4
1.6.2 Scope of the study.....	4
1.7 Significance of the study.....	4
 CHAPTER 2: Theoretical framework and literature review	
2.1 Introduction.....	5
2.2 Object relations theory.....	5
2.3 John Bowlby's attachment theory.....	6
2.3.1 Attachment, security and attachment behaviour.....	6
2.3.2 Mary Ainsworth's patterns of attachment behaviour.....	8
2.4 Literature review.....	10
2.4.1 Parenting and problem behaviour.....	10
2.4.2 Attachment and externalizing behaviour.....	16
2.4.3 Attachment and internalizing behaviour.....	26

Contents	Page No
CHAPTER 3: Research methodology	
3.1 Introduction.....	30
3.2 Research design.....	30
3.3 Description of the population.....	30
3.4 Sampling method.....	33
3.5 Procedure.....	33
3.6 Instruments.....	34
3.6.1 Demographic questionnaire.....	34
3.6.2 Experiences in Close Relationships Scale-Revised for use with Children and Adolescents.....	34
3.6.3 Pediatric Symptom Checklist.....	37
CHAPTER 4: Results	
4.1 Plan for data analysis.....	39
4.2 Preliminary analysis.....	39
4.3 Main analysis.....	41
4.3.1 Attachment, externalizing and internalizing behaviours.....	41
4.3.2 Predicting problem behaviour from attachment pattern.....	43
CHAPTER 5: Discussion of results, conclusions, limitations and recommendations	
5.1 Introduction.....	45
5.2 Relationship between attachment and internalizing behaviours.....	45
5.3 Relationship between attachment and externalizing behaviours.....	47
5.4 Conclusions, limitations and recommendations.....	49
5.4.1 Conclusion.....	49
5.4.2 Limitations of the study.....	49
5.4.3 Recommendations.....	50

Contents		Page №
6.	References.....	51
	Appendixes	
A	Information letter.....	80
B	Parent/guardian consent form.....	83
C	Child assent form.....	85

List of tables

Table		Page
Table 1:	Demographic details of the sample.....	32
Table 2:	Sample items from the ECR-RC.....	37
Table 3a:	Sample items for the PSC.....	39
Table 3b:	Sample items for the PSC-Y.....	39
Table 4:	Comparisons of mean scores on the main variables of the study	41
Table 5:	Zero-order correlations (N = 135).....	43
Table 6:	Predicting problem behaviour from attachment.....	45

CHAPTER 1

INTRODUCTION

1.1 Introduction

Externalizing (e.g., disruptive, hyperactive, and aggressive behaviours) and internalizing (e.g., withdrawal, anxiety, fearfulness and depression) behaviour problems are the single most common reason for which young children are referred for psychological treatment (Campbell, Harris, & Lee, 1995; Richman, 1985). Severe externalizing and internalizing behaviour problems that arise early in childhood are likely to be continued into later childhood and adolescence (Campbell, 1995). Additionally, many youths become involved in some type of delinquent externalizing behaviour over the course of adolescence at great cost to the individuals involved, as well as to the community (Moffitt, 1993).

Although the precise etiology of internalizing and externalizing behaviours is unknown, it is certain that these problems do not develop in a vacuum. Rather, child and adolescent development is influenced by multiple contexts, one of the most important of which is the family. Several studies support the link between attachment representations and problem behaviour. Most studies have found differences between secure and insecure attachment representations. For example Allen, Hauser and Bormans-Surrell (1996) found that adolescents under the cannot classify and dismissing participants reported more criminal behaviour than autonomous adolescents. Dozier and Tyrrell (1998) have argued that preoccupied representations would predispose towards heightened negative emotional experiences, as in internalizing disorders, whereas dismissing representations would predispose to projection of negative emotions onto others, as in externalizing disorders.

1.2 Statement of the problem

Children's attachment security has been linked to numerous developmental outcomes. Early infant-mother attachment security has been linked to positive

outcomes in child adjustment. Thus, secure attachment may serve as a protective factor against child maladjustment (Dallaire & Weinraub, 2007). Further, insecure attachment has been shown to relate to greater maladjustment, including higher levels of aggression, anxiety, and withdrawn behaviours (Moss, Rousseau, Parent, St-Laurent, & Saintonge, 1998). Specifically, disorganized and avoidant attachments have been related to higher levels of externalizing problems (Moss, Cyr, & Dubois, 2004).

However, findings have been inconsistent in linking attachment with externalizing problems (Finnegan, Hodges, & Perry, 1996). In a study which examined attachment and internalizing and externalizing behaviour problems in nine-through-twelve year olds (Roelofs, Meesters, ter Huurne, Bamelis, & Muris, 2006), insecurely attached children displayed higher scores on all internalizing and externalizing symptoms than securely attached children. Even in adolescence, Bosmans, Braet, Van Leeuwen and Beyers (2006) found attachment patterns to mediate the association between parenting and problem behaviour.

Although numerous studies have supported the relationship between attachment insecurity, particularly avoidance and externalizing and internalizing behaviours, virtually none have examined this relationship in early school age years more so in the Mankweng area of Limpopo Province. The relationship between externalizing and internalizing behaviours has not been examined across attachment classifications, as well. Thus, the current study attempts to fill these gaps by examining the relationship between internalizing and externalizing behaviours across attachment classifications in middle childhood, using a sample from Mankweng.

1.3 **Motivation for the study**

Family studies focusing on between-family differences in parenting and child outcomes indicate that maternal negativity during parent–child interactions in early childhood is significantly related to multiple informants' (e.g. mother, teacher, child) ratings of child externalizing problems across the early school

years (Denham, Workman, Cole, Weissbrod, Kendziora, & Zahn-Waxler., 2000; Heller & Baker, 2000; Park et al., 2005). Additionally, links between within-family processes and child negative outcomes also have been indicated. Within-family variation such as parental differential treatment of siblings has been linked to child behavioural problems (Conger & Conger, 1994; McGuire, Dunn, & Plomin, 1995; Stocker, 1995). Differential parenting appears to have the strongest impact on child adjustment for those children experiencing lower parental warmth and greater parental negativity (Feinberg & Hetherington, 2001).

Shared environmental factors have been identified for a variety of child outcomes. For instance, recent studies have shown shared environmental influences in the link between parenting quality and infant attachment security (Roisman & Fraley, 2008), in conduct disorder and peer deviance (Kendler, Jacobson, Myer, & Eaves, 2008), and in externalizing behaviour problems in early childhood (Saudino, Carter, Purper-Ouakil, & Gorwood, 2008).

Siblings who are reared in the same home can be remarkably different from one another. With respect to child maladjustment, typical levels of biological full-sibling similarity for externalizing (i.e. aggression, delinquency) and internalizing (i.e. anxiety, depression) problems is intra-class $r = 0.20-0.30$ (Fagan & Najman, 2003). Thus, there are considerable differences between siblings for these behavioural and emotional problems.

Children in foster care have been found to exhibit high rates of behavioural problems in their foster homes (Altshuler & Gleeson, 1999; Haerian, 1998; Kates, Johnson, Rader, & Strieder, 1991; Milan & Pinderhughes, 2000). The most common forms of such behavioural problems are temper tantrums, destructiveness, crying, verbal aggression, school difficulties, enuresis, and stealing (Haerian, 1998; Kates et al., 1991). Behavioural problems among children in foster care have been linked to the number of placements a child has experienced, infrequent parental visiting, placement due to abuse, and marital instability of the biological parents (Altshuler & Gleeson, 1999).

1.4 **Aim of the study**

To investigate the relationship between attachment and problem (i.e., internalizing and externalizing) behaviours.

1.5 **Objective of the study**

The study intends to investigate the relationship between attachment and externalizing and internalizing behaviour problems, respectively.

1.6.1 **Hypotheses**

1.6.1.1 There will be a statistically significant, negative relationship between internalizing behaviours and attachment among school-going children.

1.6.1.2 There will be a statistically significant negative relationship between attachment and externalizing behaviours among school-going children.

1.6.2 **Scope of the study**

Research was undertaken among primary school children in the Mankweng Circuit of the Department of Primary Education, Limpopo Province.

1.7 **Significance of the study**

The study will be of significance to child and adolescent health practitioners such as developmental psychologists and child and adolescent psychiatrists, mainly because these types of behaviour problems are the most common referral reasons for these professionals (Richman, 1985). Externalizing or internalizing behaviours that are present at three or four years of age are likely to be carried over to adolescence and ultimately to adulthood.

CHAPTER 2

THEORETICAL FRAMEWORK

2.1 Introduction

This chapter will outline the key theoretical concepts that form the basis of the study. Object relations theory is discussed, since this theory has somehow influenced the ideas of attachment theory, the theory of choice for this study. However, most emphasis is placed on the work of John Bowlby, especially the concepts of security, attachment and attachment behaviour, as well as the position he takes on the concepts of security and separation anxiety. In the discussion of Bowlby's theory, the researcher makes use of the terms "mother", "mother-figure", and "caretaker" interchangeably. This is done so because Bowlby (1997) indicates that the primary caretaker might not be the biological mother although in most cases probably would be. The work of Mary Ainsworth and colleagues (1978) is also discussed, especially that relating to the "strange situation" experiments and the consequent attachment categorisations that flowed from that research.

2.2 Object Relations theory and Bowlby's ideas

The term "object" is fairly central to this view, and is seen in terms of object and subject relationships. The "object" in this theory refers to perceptions of mental images of human beings who are important to the individual, and the main concern or issue is the individual's relationship with these objects. The relationship may be external, internal, real or a fantasy (Cashdan, 1988).

The object relations tradition is a loose tradition of a variety of different psychoanalytic ideas, rather than a set, systematic viewpoint. Each theorist tends to emphasize a particular part or focus of object relations (Cashdan, 1988). Some major players in the development of this school of thought include, among others, Melanie Klein. Klein is an important figure to name and illustrate since she was once a clinical supervisor of John Bowlby, the

theorist whose ideas will be described later in the chapter.

In Klein's theory the human psyche is considered to have two basic positions namely: the paranoid-schizoid and the depressive (Fonagy, 1999; Gomez, 1997). In the paranoid-schizoid position the relationship to the object (the caregiver) is to a part object split into a persecutory and idealised relationship, and the ego (the self) is similarly split (Fonagy, 1999, 2001). In the depressive position the relation is to an integrated parental image. The individual recognizes his destructive wishes towards the others.

Although Bowlby acknowledged Kleinian thinking for its emphasis on object relations he was dissatisfied with her contention that children's emotional problems are mainly due to infantile fantasies generated from internal conflicts related to aggressive drives, rather than environmental failure (Gullestad, 2001). He further took issue with Klein's understanding of development, which was based on extrapolations from clinical experience rather than on observations of normal children (Bretherton, 1995). Thus, Bowlby was profoundly sceptical about Kleinian detachment from external reality (Holmes, 1995). As a result he found an alternative theoretical model of attachment which was based on the concept of imprinting, implying that bond formation need not to be tied to feeding (Gullestad, 2001).

2.3 John Bowlby's Attachment theory

2.3.1 Attachment, security and attachment behaviour: definitions and phases of development

Attachment theory was originally introduced by John Bowlby in the nineteen fifties and early sixties, although it can be regarded as the joint efforts between him and Mary Ainsworth (Bretherton, 1991). The theory was further elaborated through the work of others, such as Mary Main and Peter Fonagy (Gullestad, 2001).

Bowlby (1988) defined attachment behaviour as any form of behaviour that results in a person maintaining proximity to a significant other, while seeking

to establish a separate self. The significant other is usually an older, larger figure who plays a mothering role. Later on the role is taken by other figures apart from the mothering one. So long as the attachment figure remains accessible and responsive, the behaviour may consist of little more than checking by eye or ear on the whereabouts of the figure and exchanging occasional glances or greetings. In certain circumstances, however, following or clinging to the attachment figure may occur, and also calling or crying which are likely to elicit care giving (Morgan, 1999). There are instances when the attachment relationship fails, to the detriment of the child. Usually there are health and developmental consequences. Bowlby's studies were among the earliest to reflect this relationship in a systematic fashion (Bowlby, 1973).

Attachment behaviour can be defined as "any of the various forms of behaviour that a child commonly engages in to attain and/or maintain a desired proximity. At any one time some form of such behaviour may be either present or absent and which it is to a high degree, dependent on the conditions obtaining at the time" (Bowlby, 1997, p. 372). Thus a clear distinction is made between attachment and attachment behaviour. Even though attachment behaviour might not always be evident, it does not necessarily indicate a lack of attachment (Ainsworth et al., 1978).

Drawing on his knowledge from ethological studies, in a 1957 paper he presented, Bowlby indicated his view that in all developmental processes there seems to be sensitive phases for certain behavioural patterns to develop. These phases determine a) whether or not the response develops at all, b) the intensity with which it is later exhibited, c) the precise motor form it takes, d) the particular stimuli that activate or terminate it".

Bowlby (1997) gives a concise description of the four phases:

The first phase involves orientation and signals that shows no discrimination of figure. The second phase is when orientation occurs and signals are indicated toward one or more definite figures. Maintaining proximity to a definite significant figure by means of both signals and locomotion defines

phase 3, while phase 4 involves the development of a relationship characterized by reciprocity between the child and the significant other (Ainsworth, 1969). Bowlby is particularly interested in phases 3 and 4 (Ainsworth, 1969).

2.3.2 Mary Ainsworth's patterns of attachment

Mary Ainsworth, a close colleague and collaborator of Bowlby, expanded his observations and reiterated the relationship between mother-infant interactions during the attachment period and the child's present and subsequent behaviours (Kaplan & Sadock, 2008). Ainsworth's natural observation studies established a foundation for further inquiry into individual differences in the quality of mother-infant interaction.

Based on the responses in conjunction with behaviours observed within the infants' natural home context, Ainsworth developed the renowned Strange Situation classification system (Ainsworth, Blehar, Waters, & Wall, 1978). Ainsworth and her colleagues described three major patterns, each with minimum of two subtypes, which will be discussed below.

2.3.2.1 Secure Infants

In this category parents are seen to be loving and warm. Maternal responsiveness and the ability to interpret and meet the child's needs appropriately are some of the key features in determining the security of attachment bonds (Angel, 1999).

2.3.2.2 Insecure avoidant

Avoidant parents typically are experienced by their infants as rejecting and very often parents in this group are distrustful and feel uneasy when people become too close to them (Sroufe, 1983).

2.3.2.3 Insecure Anxious Ambivalent

This category comprises of infants who experience a kind of ambivalent relationship with significant others, who are sometimes loving and at other times are cold and/or rejecting. Adults who display this type of attachment often themselves are afraid of abandonment but long to be important people in their lives (Sroufe et al., 1983). Anxious or avoidant attachment describes the feelings and behaviour of people who are afraid that their attachment figures may be inaccessible or not very responsive or who have repeated experiences of inconsistent care taking that serves to undermine their sense of security (Chassler, 1997).

The present study uses attachment theory because it has been found to influence not only personality development, but the development of symptoms too (Baas, Bond, & Sharpe, 1999; Bandixen, Muus, & Schei, 1994; Barsky, Barnett, & Cleary, 1994; Green, Flowe-Valencia, Rosenblum, & Tait; 2001, Sansone, Wiederman, & Sansone, 2001). Bowlby (1975) found a strong relationship between attachment failure and externalizing behaviour problems. Mikulincer and Shaver (2007) reviewed hundreds of cross-sectional, longitudinal, and prospective studies of both clinical and non-clinical samples and found that attachment insecurity was common among people with a wide variety of mental disorders ranging from mild distress to severe personality disorders and even schizophrenia. Consistently compatible results have been reported in recent studies. For example, attachment insecurities (of both anxious and avoidant varieties) are associated with depression (e.g., Catanzaro, & Wei, 2010), clinically significant anxiety (e.g. Bosmans, Braet, & Van Vlierghie, 2010), obsessive-compulsive disorders (e.g. Doron, Moulding, & Kyrios, 2009), post-traumatic stress disorder (e.g. Ein-Dor, Doron, & Solomon 2010) suicidal tendencies (e.g., Gormley, & McNeil, 2010), and eating disorders (e.g. Illing, Tasca, & Balfour, 2010).

2.4 Literature review

2.4.1 Parenting and its association with attachment and impact on behaviour problems

Research has shown that parental warmth and attachment may reduce the negative effects of stress and promote adaptive functioning in children (Garmezy, 1983). Conversely, insecure attachment is identified as a risk factor that interacts with other factors within the family and the child to increase the likelihood of childhood behaviour problems (Greenberg & Speltz, 1988). Arguably, insecure attachment may lead to deviant behaviour when children whose parents are not responsive and supportive develop models of attachment characterized by anger and hostility. These children are also likely to believe that the people in their lives will not meet their needs (Loeber & Dishion, 1983). Toth and Cicchetti (1996) proposed a similar idea claiming that a maladaptive pathway may link early insecure attachment to the development of negative models of relationship figures in later childhood. In addition to developing negative internal working models of attachment relationships, insecure children may learn to over- or under-regulate their affect and behaviour in reaction to caretakers who selectively respond to their emotional needs (Sroufe, 1983). Other research indicates that close and affectionate relationships between children and caretakers facilitate children's internalization of rules of conduct and increase the likelihood that children will feel committed to the welfare of others (Kochanska, Tjebkes, & Forman, 1998).

The relationship between punitive parenting and avoidance of the child, in particular, has yet to be explicitly studied. However, Vershueren, Dossche, Marcoen, Mahieu, and Bakermans-Kranenburg (2006) theorize that parental discipline and attachment may be linked in the context of the child expressing emotional distress. If a parent inappropriately responds to a child's distress with harsh discipline, rather than the responsiveness that may be needed to promote security, the child is unable to feel secure in the

parent's ability to comfort and respond effectively. Rather than experiencing the punitive response of the parent, children are likely to withdraw or avoid in the parent-child relationship. The child's displacement of affect with parents can lead to a hostile interactive style with others, exhibited by increased aggression and hostility in other contexts. This may be the mechanism by which punitive parenting and avoidance are related to externalizing behaviour (Vershueren, Dossche, Marcoen, Mahieu, & Bakermans-Kranenburg, 2006).

Amato (1986) examined the association between levels of marital conflict and the self-esteem of 132 children (aged 8-9 yrs.) and 142 adolescents (aged 15-16 yrs.) in Australia. Marital conflict was negatively associated with self-esteem among primary school girls but not among primary school boys. Weak negative associations between conflict and self-esteem were found for male and female adolescents. Marital conflict was negatively associated with the quality of the child-father relationship in all groups except among primary school boys. The negative effects of conflict tended to be strongest when children's relationships were poor with both parents. However, for young females, conflict was also negatively related to self-esteem when relationships with both parents were good.

Parent-child conflict and perceived attachments to parents were examined as predictors, mediators, and moderators in the marital conflict-child adjustment connection in a sample of older children and young adolescents. After controlling for marital conflict, parent-child conflict predicted additional unique variance mainly for children's externalizing problems, and attachments to parents accounted for unique variance in children's externalizing and internalizing problems. Moderation effects illustrated that a higher level of parent-child conflict was a vulnerability factor, whereas a secure attachment was a protective factor, for behaviour problems associated with marital conflict. Mediation effects were also evident and supported the proposition that parent-child conflict and attachment to parents mostly are partial mediators of effects in the marital conflict-child outcomes link. The findings illustrate the aggregation, potentiating, and amelioration of

risk for adjustment problems associated with marital conflict, and highlights the importance of assessing multiple systems within the family (El-Sheikh & Elmore-Staton, 2004).

Parental psychopathology has been found to be a consistent and robust correlate of children's maladjustment (DelBello & Geller 2001; Goodman & Brumley 1990; Lapalme, Hodgins & LaRoche, 1997). Due to the prevalence of depression, especially in women, maternal depression has been the focus of numerous research studies on parental psychopathology and its association with child psychopathology. Findings in the extant literature provide substantial evidence for an association between maternal depression and negative child outcomes, including internalizing and externalizing child problem behaviours (Beardslee et al., 1998; Cummings & Davies, 1994; Gelfand & Teti, 1990).

Studies of outcomes for school-aged children and adolescents of depressed mothers have documented associations between maternal depression and behaviour problems, including higher rates of externalizing problems and more serious forms of antisocial behaviours as assessed by parent, teacher, and self-report (Hay et al., 2003; Munson et al., 2001) and teacher-reports of academic and behaviour problems at school (Sinclair & Murray 1998). Other research using parent and teacher reports has found higher levels of social maladjustment in children of mothers with depressive symptoms, including lower levels of social competence and adaptive functioning (Luoma et al., 2001), as well as poor adjustment and self-esteem (Cummings et al., 2005; Wilkins et al., 2004). Moreover, numerous studies have found elevated rates of internalizing behaviours, especially depression, in children of depressed mothers (Cummings et al., 2005; Hammen & Brennan, 2003; Leve & Pears, 2005).

Muris, Meesters, Merckelbach and Hulsenbeck (2000) demonstrated that insecure attachment and negative parental rearing behaviours (rejection and overprotection) both explained a significant proportion of the variance in the worry scores of 9- to 13-year-old children. In another study with a large

sample of non-clinical adolescents, Muris et al. (2003) also found evidence to suggest that both insecure attachment and negative parental rearing accounted for a unique proportion of the variance in internalizing symptoms. In the case of externalizing symptoms, however, only parental rearing behaviours explained a significant proportion of the variance. Further, no evidence was obtained for gender-specific relationships between parental rearing and internalizing and externalizing, indicating that there were no specific associations between negative rearing practices of fathers and symptoms in boys, and between negative rearing behaviours of mothers and symptoms in girls.

In the coercion model, the primary pathway to child and adolescent externalizing problems is through reciprocal, coercive interchanges between the child and parent (Patterson, Reid, & Dishon, 1992). Within this model, harsh discipline has been identified as a key variable in accounting for variance in child externalizing outcomes (Eddy & Chamberlain, 2000; Keiley et al., 2003). Simons, Chao, Conger and Elder (2001) examined change in delinquent behaviour across four waves of data from ages 12/13 to 15/16 and found that harsh parenting predicted growth trajectories of delinquency. According to Carr (1999), neglect, abuse, separations, lack of opportunities to develop secure attachments, harsh, lax or inconsistent discipline are among the more important aspects of the parent-child relationship that place youngsters at risk of developing conduct disorders. Parenting behaviour and parent characteristics such as depression are among the strongest predictors of child behaviour problems (Marshall & Watt, 1999). Scott (1998) showed that five aspects of how parents bring up their children have been found repeatedly to have long-term association with conduct disorders. These include among others poor supervision, erratic harsh discipline, parental disharmony, rejection of the child and low parental involvement in the child's activities. Harsh parenting is often correlated with maternal depression and marital discord, but each has been shown to have independent effects on externalizing behaviour (Burke, 2003; Marchand, Hock, & Widaman, 2002).

Like harsh parenting, maternal depression is related to growth in child externalizing problems (Munson et al., 2001; Owens & Shaw, 2003). Impulsive temperamental characteristics in early childhood also relate to externalizing problems in later childhood and adolescence (Schwartz, Snidman, & Kagan, 1996; Shaw, Owens, Giovannelli, & Winslow, 2001). For example, lack of self-control in childhood was found to relate to teacher and parent reports of externalizing behaviour problems assessed between ages 9 and 15 (Caspi, Henry, McGee, Moffitt, & Silva, 1995), and children rated as high on novelty seeking were at greater risk for early adolescent externalizing behaviour (Tremblay, Pihl, Vitaro, & Dobkin, 1994). Additionally, childhood fear/shyness might have a protective effect, as such characteristics are negatively associated with externalizing problems in adolescence (Moffitt, Caspi, Dickson, Silva, & Stanton, 1996; Schwartz et al., 1996).

Conflict between parents, whether in intact or divorced families, is a risk factor for externalizing and internalizing behaviour problems, low school achievement and low social competence (Cummings & Davies, 1994; Grych & Fincham, 1990). It has been well established that child behaviour problems are associated with harsh parental discipline (e.g., yelling, arguing, slapping) in late childhood (Gershoff, 2002). Previous research with school-age children indicates that the relationship between harshness of discipline and child externalizing problems may be buffered by the presence of parental warmth, or exacerbated in the context of parent-child relationship lacking warmth (Deater-Deckard, Ivy, & Petrill, 2006).

The relationship between symptoms of internalizing and externalizing behaviour on the one hand, and insecure attachment towards the primary caregivers on the other, was associated with higher scores on symptoms of anxiety, depression and aggression, except for attachment towards the mother and scores of depression (Roelfs, Meetsters, ter Huurne, Bamelis, & Muris; 2006). These results are in line with findings that have been reported earlier in the child psychopathology literature (e.g., Greenberg et al., 1991; Renken, Engeland, Marvinney, Mangelsdorf, & Sroufe, 1989; Troy & Sroufe,

1987; Warren et al., 1997). Importantly, in examining the relative contribution of attachment style towards the caregivers and perceived parental rearing behaviours to symptoms of internalizing and externalizing, only insecure attachment of boys towards the father explained a significant proportion of the variance in symptoms of anxiety and depression, indicating a gender-specific relationship. This finding is partly in line with findings reported by Muris et al. (2003). Muris et al. found evidence to suggest that insecure attachment is only related to internalizing symptoms. However, as Muris et al. (2003) demonstrated that both attachment style and parental rearing behaviours accounted for a unique proportion of the variance in internalizing and externalizing symptoms.

With regard to the relationship between perceived parental rearing behaviours and internalizing and externalizing symptoms, all dimensions of parental rearing explained a significant proportion of the variance in most indices of internalizing and externalizing symptoms, which is in keeping with previous research (Garber et al., 1997; Muris & Merckelbach, 1998; Muris et al., 2003; Wasserman et al., 1996). Importantly, parental rejection was most consistently and substantially associated with severity of internalizing and externalizing symptoms. Further, anxious rearing was also consistently associated with severity of internalizing symptoms with the highest associations found with anxiety scores. In examining the relative contribution of both family factors to symptoms of internalizing and externalizing, parental rejection and anxious rearing still remained the most robust predictors of internalizing and externalizing symptoms. Support for gender-specific relationships was found for parental rejection and overprotection of the mother, indicating that in addition to some common pathways by which perceived rearing behaviours of the mother or the fathers influence internalizing and externalizing symptoms, there may also exist specific ways in which attachment and rearing behaviours of the mother or the father differentially influence symptoms of internalizing and externalizing in girls or boys respectively (Roelofs et al., 2006).

Children in foster care have been found to exhibit high rates of behavioural

problems in their foster homes (Altshuler & Gleeson, 1999; Haerian, 1998; Kates et al., 1991; Milan & Pinderhughes, 2000). The most common forms of such behavioural problems are temper tantrums, destructiveness, crying, verbal aggression, school difficulties, enuresis, and stealing (Haerian, 1998; Kates et al., 1991). Although behavioural problems are present in most children in foster care, it is difficult to determine the origin of their problems. Behavioural problems among children in foster care have been linked to the number of placements a child has experienced, infrequent parental visiting, placement due to abuse, and marital instability of the biological parents (Altshuler & Gleeson, 1999). Behavioural problems may also be a manifestation of a longing for a lost attachment figure, a result of unresolved mourning of separations, or a representation of disordered attachment (Kates et al., 1991; Milan & Pinderhughes, 2000).

Another family factor that is thought to play a role in the etiology of internalizing and externalizing problems in children and adolescents is parental rearing (Wenar & Kerig, 2000). Factor analytic studies have identified two main dimensions of parental rearing. The first dimension can be described as 'care' and refers to behaviours related to acceptance, warmth, and on the reverse side, rejection and criticism. The second dimension is labelled as 'control' and refers to parental control, overprotection, and on the opposite side, promotion of autonomy (Muris, Meesters, & Van Brakel, 2003). A comprehensive review by Rapee (1997) has suggested that negative parental rearing behaviours are associated with higher levels of anxiety and depression. There is indeed some evidence to suggest that rejection, lack of emotional warmth, and overprotection may promote the risk for developing both internalizing and externalizing problems (Muris, Meesters, & Van den Berg, 2003; Muris & Merckelbach, 1998; Wasserman, Miller, Pinner, & Jaramillo, 1996) as well as for childhood depression (e.g., Garber, Robinson, & Valentiner, 1997). Further, parental control and overprotection and the absence of autonomy promotion may predict anxiety disorders in youths (e.g., Ginsburg, Siqueland, Masia-Warner, & Hedtke, 2004; Siqueland, Kendall, & Steinberg, 1996; Rapee, 1997).

2.4.2 Attachment and externalizing behaviours

Past researchers have explored externalizing behaviours, including aggressive behaviour, delinquent behaviour, attention problems and risky sexual activity within the framework of attachment theory (Dilorio, Dudley, Kelly, Soet, Mbwarra, & Potter, 2001; Dishion et al., 1999; Prinstein, Boergers, & Spirito, 2001). Studies of aggression in children have built on Bowlby's idea that the maladaptive views of the self and others result from insecure parent-child relationships, and put a child at risk for aggression. Main and Goldwyn (1984) found that insecurely attached infants acted more aggressively toward their mothers than did securely attached infants. This greater aggressiveness has been shown to carry over into childhood among children with an avoidant attachment classification from a low income sample (Renken et al., 1989). Studies of middle income samples however failed to find some association (Fagot & Kavanagh, 1990), with the exception of Teti and Ablard's (1989) sibling study which found securely attached children to be less aggressive and to have more grievances than insecure children. When measuring security of attachment Teti and Ablard found that securely attached children were less likely to aggress and protest in the absence of the primary caregiver. Aggression and attachment have also been examined among physically abused, neglected, and non-abused/non-neglected children (Finzi, Ram, Har-Evan, Shnit & Weizman, 2001). Finzi et al.'s (2001) study found that abused children were significantly more likely to have an avoidant attachment style and higher aggression scores than the two groups, whereas neglected children were significantly more likely to display ambivalent low aggression than abused children. Non-abused/non-neglected children were characterized by a secure attachment style and low aggression, attachment and low aggression.

Aggression and noncompliance in childhood have been linked to antisocial behaviour in adolescence (Loeber & Dishion, 1983), which researchers have only more recently begun to examine in relation to attachment (Dishion,

McCord, & Poulin, 1999; Hops, Andrews, Duncan, Duncan, & Tildesley, 2000; Urberg, Degirmencioglu, & Pilgrim, 1997). Many studies of adolescents' attachment to parents, however, have focused on current relationship quality rather than attempting to assess the adolescent's models of attachment relationships formed in childhood. For example Simons, Paternite and Shore (2001) found that adolescents' perceived quality of mother-adolescent attachment was negatively correlated to self-reported aggression. Other research has used attachment theory to investigate how attachment to parents carries over specifically into other intimate relationships. For instance, securely attached adolescents have been found to be more likely to be engaged in reciprocally aggressive dating relationships than are securely attached adolescents (Bookwala & Zdaniuk, 1998). In terms of more global measures of aggression and other externalizing behaviours, the child or adolescent's internal working model of attachment relationships is thought to be the link between poor parenting in childhood and problem behaviour in adolescence (Allen, Aber, & Leadbeater, 1990).

The study of delinquency as it relates to attachment is rooted directly in Bowlby's original conception of attachment theory, which was developed in part to explain the personality of juvenile thieves (Arsenio, Shea & Sacks, 2000). Bowlby posited that these juveniles had developed internal working models of others as unworthy of trust, empathy, and concern leading to an insensitive interpersonal style. In Hirschi's criminological theory of delinquent behaviour, attachment was described as an affective relationship that facilitates the internalization of norms. Those with insecure attachments may lack social bonds that would cause them to identify with the social order (Arsenio et al., 2000).

More recent work has produced evidence to support the claims that attachment is related to delinquency. For example, Arsenio et al. (2000) found that juvenile offenders were more likely to be insecurely attached than their peers, while Allen, Moore, Kuperminc and Bell (1998) found that a combination of adolescent reported self-worth, adolescent-reported

attachment to mother, and mother-reported maternal control predicted mother-reported delinquent behaviour. It was posited that delinquency may be a form of rebellion against the attachment figure's norms and controls among insecure adolescents (Allen et al., 1997). Among insecure preoccupied adolescents, delinquency may act as a dysfunctional form of attachment behaviour, increasing the intensity of interaction with attachment figures (Allen et al., 1998).

Although less research has been devoted to exploring the relationship between attention problems and attachment, few studies have attempted to link the two constructs. Ladnier and Massanari (2000) pointed out that behaviours characteristic of avoidant children are similar to symptoms of ADHD, but failed to produce evidence that ADHD occurs with greater frequency among children with an avoidant attachment style. Alternatively, another study found that the type of attachment insecurity that was present in those children diagnosed with ADHD was consistent with an ambivalent attachment style (Clarke, Ungerer, Chahoud, Johnson & Stiefel, 2002). Smith (1994) pointed a phenomenon he referred to as "dis-attachment" that results from a failure of the mother to bond with a child who is very demanding and difficult to comfort. Almost all of the children Smith studied who experienced this dis-attachment also exhibited symptoms of ADHD. Rather than proposing that the lack of secure attachment causes ADHD, however, he claimed that an underlying deficit in the neurotransmitter serotonin is responsible for symptoms of ADHD as well as those behaviours that prohibit proper parent-child bonding.

A growing body of literature suggests that externalizing and internalizing problems co-occur among youth at a rate greater than to be expected by chance (Albano, Chorpita, & Barlow, 2003; Woolston, Rosenthal & Riddle 1989). As an example, attention deficit hyperactivity disorder (ADHD), one diagnosis in the externalizing disorder domain, co-occur with a mood disorder in 15 to 75% of cases (e.g., Anderson, Williams, & McGee, 1987; Biederman, Faraone, & Keenan, 1990; Bird, Canino, & Rubio-Stipec, 1988) and with an anxiety disorder in 25 to 63% of cases (e.g., Biederman et al.,

1990, Vance, Luk, Costin, Tonge, & Pantelis, 1999).

ADHD in childhood has been identified as a significant predictor for later criminality. Clinical studies were the first to suggest this link. Satterfield et al. (1982) conducted an 8-year follow-up of clinic-referred boys with ADHD and normal comparisons. Official county records at age 17 showed significantly higher rates of arrests and incarcerations for the patient group. In a later follow-up (mean age, 22), ADHD probands, compared to controls, continued to show significantly higher arrest rates as adults (Satterfield & Schell, 1997). Based on official state arrest records of clinic-referred children with ADHD at mean age 21, Barkley et al. (2004) also found significantly more arrests and felonies in probands than in normal comparisons. In another follow-up study of clinic-referred children, Hechtman et al. (1984) reported that, at age 19, ADHD probands tended to report more court referrals during the preceding five years than controls.

Community studies have yielded similar findings. Farrington et al. (1990) followed 8- to 9-year-old boys in London, classified as having hyperactivity-impulsivity-attention deficit (HIA), conduct problems, neither, or both. Official arrest records obtained at ages 10–16 and 17–25, revealed that children with HIA, with or without conduct problems, had significantly increased juvenile and adult criminality than children without HIA. In a prospective study of a New Zealand birth cohort, Moffitt and Silva (1988) reported that, at age 11, 18% of delinquents vs. 2% of non-delinquents had a history of ADHD. In a Swedish community study, Rasmussen and Gillberg (2000) followed 6 year olds with and without ADHD. At age 22, 19% of probands vs. none of the comparisons reported having committed criminal offenses. A prospective population study of elementary school children in San Francisco obtained self-reports of criminality and official State arrest records when subjects reached age 26 (Babinski et al., 1999).

Numerous studies have found empirical evidence to support the relationship between insecure-avoidant attachment and externalizing behaviour problems. In infancy, findings support that children with avoidant

attachments have shown higher levels of aggressive behaviour. Main and Weston (1981) found, in a sample of thirty-eight infant-mother dyads, that at 12 months old an infant's avoidance of their mother was related to active disobedience to maternal commands, and tantrums (Main & Weston, 1981). Research examining attachment in infancy and later behaviour in early and middle childhood has supported that insecurity is positively correlated with later increased child aggressive behaviours, particularly in the classroom (Dallaire and Weinraub, 2007). In preschoolers, 85% of children with anxious attachment in infancy at 12 and 18 months had behavioural problems in preschool (Colin, 1996). Once in school, Vando, Rhule-Louie, McMahon, and Spieker (2008) found that mother-reported conduct problems at Grade 1 were predicted by children being attached in insecure-avoidant and ambivalent ways.

Research has also supported a relationship between attachment and externalizing behaviour in childhood, finding a correlation between insecure attachments in childhood and externalizing behaviour concurrently. Moss, Bureau, Cyr, Mongeau, and St-Laurent (2004) found that mothers of disorganized and insecure-avoidant children at 3 years old reported higher externalizing symptoms than did mothers of secure children, with the mothers of insecure-avoidant children reporting higher hyperactivity/distractibility. The difference between avoidant children and other insecure attachments was supported in the Finnegan, Hodges and Perry (1996) study of third through seventh graders, which showed avoidant, but not preoccupied (e.g., ambivalent) coping, to predict externalizing problems in both boys and girls. In a study which examined attachment and internalizing and externalizing behaviour problems in nine through twelve year olds (Roelofs et al., 2006), insecurely attached children displayed higher scores on all internalizing and externalizing symptoms than securely attached children.

Englund, Oliva and Collins (2008) found problem drinking to be a long-term developmental process wherein childhood externalizing behaviour problems were found to be a risk factors leading to heavy drinking during and after

adolescence. Higher levels of externalizing behaviour problems at age 9 and drinking more when the participants were age 16 increased the odds that men would have a current alcohol use disorder at age 28 (Englund, Oliva, & Collins, 2008). Researchers examining developmental predictors of adolescent alcohol use have found a number of risk and protective factors associated with alcohol use in adolescence. These factors include demographic variables (e.g., gender, ethnicity), individual variables (e.g., externalizing behaviour problems, delinquent activity, depression, academic achievement) (Chassin & Ritter, 2001; Chassin, Hussong, Barrera, Molina, Trim & Ritter, 2004; Hops, Davis, & Lewin, 1999; Johnson & Pandina, 1991; Siebenbruner, Englund, Egeland, & Hudson, 2006; Walden, McGue, Iacono, Burt, Elkins, 2004; Windle & Windle, 2003).

One important predictor of adolescent and early adult alcohol use is externalizing behaviour problems [e.g. conduct disorder, aggressiveness, ADHD, under control, impulsivity (Alati, Najman, Kinner, Mamun, Williams, & O'Callaghan, 2005; Caspi, Moffitt, Newman, & Silva, 1996; Disney, Elkins, McGue, Iacono, 1999; Fergusson, Lynskey, 1998; Jessor & Jessor, 1977; Zucker, 2006; Siebenbruner, Englund, Egeland, & Hudson, 2006)]. Researchers have found that externalizing behaviour problems in childhood are related to earlier onset of drinking in adolescence (Mayzer, Puttler, Wong, Fitzgerald, & Zucker, 2002; Windle, 1993), as well as problem drinking behaviour, including alcohol abuse and dependence in early adulthood (Caspi et al., 1996; Fergusson, & Lynskey, 1998; Fergusson, Horwood, & Ridder, 2005; Sartor, Lynskey, Heath, Jacob, & True, 2006; Siebenbruner et al., 2006). This link between externalizing behaviour problems and later problems with alcohol use has been found most extensively in males (Bennett, McCrady, Johnson, & Pandina, 1999; Caspi et al., 1996; Chassin, Pitts, & Prost, 2002; Pulkkinen, & Pitkänen, 1994). Internalizing behaviour problems (e.g., depression, anxiety) have also been examined for their relation to alcohol use, but results vary across studies. Some studies have found higher levels of alcohol use associated with higher levels of internalizing problems; others have found lower levels of alcohol use associated with higher levels of internalizing problems.

Longitudinal studies have shown that the stability of externalizing problems is relatively high from preschool age into adolescence (Moffitt, Caspi, Dickson, Silva, & Stanton, 1996; Smith, Calkins, Keane, Anastopoulos, & Shelton, 2004). Moreover, early externalizing problems are predictive of other forms of psychopathology and often interfere with the child's personal, social and academic development (Campbell, 2002; Moffitt, 1993).

Although various theoretical models of the development of externalizing problems in the very first years of life (Campbell, Shaw, & Gilliom, 2000; Moffitt, 1993, Greenberg, 1999; Sameroff & Chandler, 1975) differ in the emphasis they place on the role of certain etiological factors, they agree on the assumption that multiple factors from various domains additively and interactively contribute to the emergence and maintenance of externalizing problems. Taken together, four domains of factors have been proposed to contribute to their development: parent-child interaction and parent-child attachment, child characteristics (e.g., temperament and cognitive abilities), parental characteristics (e.g., personality), and contextual characteristics (e.g., socioeconomic status, partner support and stressful life events).

From a transactional perspective (Sameroff & Chandler, 1975), externalizing problems are assumed to emerge and to stabilize or change in children's continuous interactions with their immediate environment, particularly in the interactions with their primary caregivers. Repeated observations of parental and child behaviours during parent-child interactions are thus indispensable to gain more insight into the early development of externalizing behaviour problems. Multiple dimensions of parental behaviour in parent-child interaction have been found to be associated with behaviour problems in children at various ages. A lack of positive parenting behaviours, such as the expression of sensitivity, warmth, involvement, acceptance, and positive guidance, was reported to be related to externalizing problems in preschoolers (Brophy & Dunn, 2002; Côté, Vaillancourt, LeBlanc, Nagin, & Tremblay, 2006; Gardner, 1987; Pettit, Bates, & Dodge, 1997). In addition, high levels of negative parental control such as harsh discipline,

intrusiveness, negativity, and hostility was also associated with externalizing problems (Belsky, Woodworth & Crnic, 1996; Campbell, Pierce, Moore, & Marakovitz, 1996; Rubin, Burgess, Dwyer, & Hastings, 2003).

Several child characteristics can prompt the development of externalizing behaviour, both directly and indirectly by affecting the quality of parent-child interactions. A considerable body of research has shown associations between externalizing problems and child temperamental characteristics with a crucial role for negative emotionality denoting negative mood, irritability, and high-intensity reactions like anger (Sanson, Hemphill, & Smart, 2004). In contrast, temperamental inhibition and fear/shyness may act as a protective factor as these characteristics have been demonstrated to be negatively associated with later externalizing problems (Lacourse, Nagin, Vitaro, Côté, Arseneault, & Tremblay, 2006; Schwartz, Snidman, & Kagan, 1996). Nevertheless, the relationship between child temperament and externalizing behaviour is not always clear or direct. Etiological models of externalizing behaviour increasingly propose that children with temperamental difficulties are more vulnerable to negative rearing influences than children without such difficulties (Belsky, 1997; Moffitt, 1993). Several recent studies have substantiated this latter assumption (Bates, Pettit, Dodge, & Ridge, 1998; Belsky, Hsieh, & Crnic, 1998; Hemphill & Sanson, 2001; Lacourse et al., 2006; Leve, Kim, & Pears, 2005).

The adjustment erosion hypothesis posits that initial externalizing or internalizing symptoms reduce later academic competence and increase future vulnerability to symptoms from other domains. From this perspective, prior externalizing or internalizing symptoms would lead to later academic difficulties. In the case of a child with initial externalizing problems, such behaviours commonly associated with externalizing problems (e.g., inattention, impulsivity, aggression, or hostility) would limit the opportunities for learning to occur in the classroom, thereby impeding academic competence directly (Chen, Rubin, & Li, 1997; Dishion, Patterson, Stoolmiller, & Skinner, 1991), and because of the greater probability of social rejection by healthy peers and acceptance by more deviant peers (Dishion,

1990), lead to disinterest in school and indirectly reduce academic achievement (Chen, Rubin, & Li, 1997; Schwartz, Gorman, Nakamoto, & McKay, 2006). At extreme levels, aggression could also increase children's likelihood of school expulsion (Risi, Gerhardstein, & Kistner, 2003), which would remove them from the context in which academic competence is fostered.

Mechanisms also have been proposed for why initial externalizing may lead to subsequent internalizing symptoms. For example, difficulties associated with externalizing problems (e.g., frustration tolerance, attentional difficulties) may increase the likelihood of poor family or peer relationships, both of which may contribute directly to heightened anxiety and lower self-worth (Burks, Dodge, & Price, 1995; Coie, Terry, Lenox, Lochman, & Hyman, 1995), and leave children more vulnerable to depression (Reinherz et al., 1993).

Cascading effects between initial externalizing and later academic or internalizing problems have been found in several previous investigations. For example, boys ages 7–12 years who were diagnosed with externalizing types of disorders such as oppositional defiant disorder or conduct disorder were at increased risk for depression by age 18 (Burke, Loeber, Lahey, & Rathouz, 2005). Capaldi (1992) found that twice as many boys with conduct problems in sixth grade reported increases in depressive symptoms at eighth grade, compared to boys with internalizing problems in sixth grade who reported increases in conduct problems by eighth grade, a general pattern of results that has been replicated by other researchers (Lahey, Loeber, Burke, Rathouz, & McBurnett, 2002).

Early externalizing symptoms have been repeatedly implicated in the establishment of later, poor academic functioning and achievement (Ansary & Luthar, 2009; Campbell, Spieker, Burchinal, Poe, & The NICHD Early Child Care Research Network, 2006; Chen et al., 1997; Maguin & Loeber, 1996; Stipek & Miles, 2008). Notwithstanding, a recent analysis of six large national data sets indicated that, controlling for children's prior academic

achievement and attentional problems, high levels of children's externalizing behaviour problems around the time of kindergarten entry were weakly associated with low levels of subsequent reading and/or math achievement in only two of the six data sets (Duncan et al., 2007). Specifically, their analysis of data drawn from the children of the National Longitudinal Survey of Youth—79 indicated that high levels of externalizing problems at kindergarten entry were associated with low levels of reading achievement at age 13–14. The analysis of data drawn from the NICHD Study of Child Care and Youth Development also indicated that low levels of externalizing and attention problems at kindergarten entry were associated with high achievement scores in the fifth grade.

Findings on the developmental course of externalizing behaviour have been more mixed. Different studies indicate decreasing or increasing externalizing behaviour from early childhood to adolescence depending on the measure, reporting agent, and age span used (e.g., Loeber, Burke, Lahey, Winters, & Zera, 2000; Munson, McMahon, & Spieker, 2001). For example, Keiley, Howe, Dodge, Bates, and Pettit (2001) used the externalizing scale from the Child Behaviour Checklist (CBCL; Achenbach, 1991) and found that externalizing behaviour decreased from kindergarten through Grade 8 on the basis of mother reports but increased when teacher reports were examined. However, in a recent, large-scale study examining the normative developmental trajectories of externalizing behaviour using the CBCL, Bongers et al. (2003) found a significant reduction in child externalizing from ages 4 to 18. Overall, most studies find that boys have higher mean levels of externalizing behaviour than girls (Broidy et al., 2003), though there is some evidence that growth rates may differ by sex, with the gender gap closing over time (Galambos, Baker, & Almeida, 2003).

2.4.3 **Attachment and internalizing behaviours**

Research has found that adolescents with secure attachment representations are less hostile toward peers, less anxious, and less helpless than adolescents with insecure attachments (Kobak & Sreery,

1988). In addition, secure adolescents report generally superior functioning in such areas as adaptive coping with negative emotions and sense of self efficacy (Cooper et al., 1998). On the other hand, adolescents with insecure attachment representations often show rigid emotion related behaviours as well as a poor access to their emotions. Adolescents insecure attachment has also been linked to high levels of psychological symptoms (i.e. depression, anxiety, anger, or hostility), poor self-concept, and high levels of both problematic and risky behaviour (i.e. drug and alcohol use, indiscriminate or precocious external sexual behaviour, delinquency, and educational under achievement) (Cooper, et al., 2003).

Adolescents who have problems regulating their emotions may be more vulnerable to not only internalizing problems but externalizing problems as well. Past research has examined adolescent attachment and its relation to problem behaviours (Allen et al., 1998; Cooper et al., 1998; Silk et al., 2003; William & Kelly, 2005). Specifically, research has assessed insecure attachment and its relation to externalizing behaviours. Attachment insecurity has displayed a trend toward associations with higher levels of externalizing behaviour by early adolescence (Allen et al., 1998). Anxious-ambivalent adolescents have been found to be the most poorly adjusted, reporting not only the highest symptom levels and poorest self-concepts, but also the highest levels of problematic or risky behaviour (Cooper et al., 2003). Also, avoidant adolescents are less involved in both delinquent and substance use behaviours. In fact, avoidant adolescents have been found not to differ from their secure counterparts on the majority of risk or problem behaviours, as well as being significantly less likely than secures ever to have had sex or used substances (Cooper et al., 2003). However, adolescents who are relatively more able to talk about attachment experiences in ways that reflected balance, perspective, autonomy, and open acknowledgement of the importance of attachment are less likely to engage in externalizing or delinquent behaviours (Allen et al., 1998).

There are also models for suggesting that initial internalizing problems might lead to later academic difficulties or externalizing problems. Internalizing

symptoms may undermine academic competence by eroding cognitive functioning (Maughan et al., 2003), or by interfering with attentional focus and participation during classroom learning activities (Roeser, van der Wolf, & Strobel, 2001). Internalizing symptoms, such as being withdrawn or passive, may also discourage the use of adaptive learning strategies, resulting in poorer academic self-efficacy and performance (Roeser et al., 2001). Initial internalizing problems also have been linked to increases in externalizing problems through two processes. First, children may “mask” depression by acting out and engaging in antisocial activities (Carlson & Cantwell, 1980). Second, because of high rates of peer rejection and isolation, children with initial internalizing problems may be more likely to develop relationships with deviant peers, who would then model and reinforce them for engaging in antisocial activities (Oland & Shaw, 2005).

Several risk factors have been jointly associated with academic incompetence, and internalizing and externalizing problems, including temperament (Rothbart, Derryberry, & Hershey, 2000), insecure attachment (Moss et al., 2006), neighborhood adversity (Ingoldsby & Shaw, 2002; McLeod & Shanahan, 1996), ineffective parenting (Barber & Olsen, 1997; Best, Hauser, & Allen, 1997), and low intelligence (Masten, Hubbard, Gest, Tellegen, Garmezy & Ramirez; 1999).

Epidemiological and community-based studies suggest that internalizing behaviour is relatively stable across childhood but increases somewhat during adolescence (Bongers, Koot, van der Ende, & Verhulst, 2003; Twenge & Nolen-Hoeksema, 2002). There is also evidence that internalizing trajectories vary by sex, with girls showing higher mean levels and sharper increases in internalizing symptoms from childhood to adolescence than boys (Angold, Erkanli, Silberg, Eaves, & Costello, 2002; Keiley, Lofthouse, Bates, Dodge, & Pettit, 2003). A metaanalysis of 310 studies using the Children’s Depression Inventory (Kovacs, 1985) suggested that girls had slightly fewer depressive symptoms in childhood but surpassed boys after age 13 (Twenge & Nolen-Hoeksema, 2002).

Childhood fear, shyness, and emotional reactivity/ inhibition to novelty have been shown to reliably predict concurrent and later internalizing problems at clinical and symptom levels (Colder, Mott, & Berman, 2002; Kagan, Snidman, Zentner, & Peterson, 1999; Prior, Smart, Sanson, & Oberklaid, 2000). For example, Schwartz, Snidman and Kagan (1999) found that 61% of the toddlers who avoided novelty displayed anxiety symptoms in adolescence, whereas only 27% of the toddlers who were uninhibited showed anxiety symptoms in adolescence. There is some indication that fear/shyness shares a common genetic liability with depression and anxiety, which may partially explain the predictive effects (Goldsmith & Lemery, 2000; Ono et al., 2002).

In addition, numerous studies have linked parental depression with child internalizing behaviour (NICHD Early Child Care Research Network, 1999; Spence, Najman, Bor, O'Callaghan, & Williams, 2002). Thus, children with a depressed parent have a dual-risk for showing increases in internalizing problems: They are genetically predisposed to have a fearful temperament, and they are exposed to an environment in which the parent suffers from depression. Exposure to harsh discipline and marital discord also increases the likelihood that children will develop internalizing problems (Buehler, Anthony, Krishnakumar, & Stone, 1997; Capaldi, 1992; Davies & Windle, 2001; Shaw, Keenan, Vondra, Delliquadri, & Giovannelli, 1997).

Children's attachment security has been linked to numerous developmental outcomes in children. Early infant-mother attachment security has been linked to positive outcomes in child adjustment. Secure attachment may, thus, serve as a protective factor against future child maladjustment (Dallaire & Weinraub, 2007). Furthermore, insecure attachment has been shown to relate to greater maladjustment, including higher levels of aggression, anxiety, and withdrawn behaviour (Moss, Rousseau, Parent, St-Laurent, & Saintonge, 1998). Specifically, disorganized and avoidant attachments have been related to higher levels of externalizing problems (Moss, Cyr, & Dubois, 2004).

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter the research method and process will be described. The research design is indicated. The selection of participants is discussed. An overview will be given of specific questionnaires used for this study, as well as the process of data collection and data analysis.

3.2 Research design

The present study was a cross-sectional design, sometimes called a correlational design. It involves the collection of data at one point only, when no follow-up data collection is needed. Research was undertaken among primary school children in Mankweng, Polokwane. This area falls under the Mankweng Circuit of the Department of Basic Education, Limpopo Province. The researcher used a sample of 135 primary school children, aged 11 years to 14 years and their primary caregivers. Internalizing and externalizing behaviours were the dependent variables, attachment the predictor variable.

3.3 Description of the population

The population of the study consisted of learners and their primary caregivers from three primary schools, namely, Pula-Madibogo, Dikolobe, and Tjatjaneng Primary Schools. The schools are located in Mankweng, Limpopo Province. They have a largely Black African student body, and attract students from both rural and urban backgrounds, although the majority of them come from the former. Table 1 below shows the description of the participants with regard to their gender, age, home base and parents' occupation. The participants' ages ranged from 11 to 14 yrs., with the 11 year olds forming the largest percentage and the 14 year olds being the

smallest percentage of the total sample. Hundred and five (77.8%) of the parent/guardian participants were female and 75 (55.6%) reported to be residing in a township/urban area. Forty three (31.9%) were married. Parents were asked to determine, taking both their own and spouses' level of education and income, what their family's social class is. Most parents stated that their family was either middle class (35.6%) or lower class (40%).

Table 1:
Demographic details of the sample

Demographics	N	%
Gender		
Male	56	41.5
Female	79	58.5
Age		
11	62	45.9
12	62	31.1
13	23	17.0
14	8	5.9
Grade		
5	42	31.1
6	45	33.3
7	48	35.6
Domicile		
Rural/village	60	44.4
Township/urban area	75	55.6
Marital status (parent/guardian)		
Married	43	31.9
Single	92	68.1
Parent/guardian level of education		
Degree and post-graduate degree/diploma	37	27.4
Grade12	49	36.3
Grade7-11	21	15.6
Grade1-6	24	17.8
No formal education	4	3.0
Family class		
Upper class	11	8.1
Middle class	48	35.6
Lower class	54	40.0
Working class	22	16.3

3.4 **Sampling method**

The sampling method applied in this study was non-probability sampling. Specifically, non-probability convenience sampling was used. It is close to accidental or incidental sampling. This sampling method is economic and not difficult to conduct. It saves time and money. The researcher visited the chosen schools as per appointment. Participants were recruited in groups from classrooms and mailed forms were sent to participant learners' primary caregivers.

3.5 **Procedure**

After the proposal for the study was approved by the University Ethics Committee, the researcher approached the Limpopo Provincial Government Department of Education in Polokwane for permission to conduct the study in three local primary schools. After permission was granted, the researcher approached Mankweng Circuit of the Department of Education for permission to approach the schools within the jurisdiction. After permission was granted the researcher approached the learners in their classrooms, with the cooperation of the concerned teachers and school principals.

Invitation letters and consent forms send to both learners and parents/primary guardians. After written consents were obtained from both parents/primary guardians and learners, the researcher began outlining the instructions of filling in questionnaires, and the presentation was in English. Participants were also urged to direct their questions to the researcher in the event that difficulties arose. Furthermore, respondents were encouraged to work individually, quietly, honestly and as quickly as possible.

It took participant learners an average of 45-50 minutes to complete the questionnaire. However, some of the learners took longer than others as they had difficulty understanding some items of the questionnaire. The researcher decided to help them reading all the items out loud and explained where there was a need.

Most of the learners reported that the questionnaire was very long which resulted in their inability to complete all the items; however, more than half of the participants managed to complete the questionnaire. Questionnaires filled by learners themselves were collected by the researcher the very same day they were filled and those filled by parents two days after being mailed. The questionnaires included a demographic factors section, the Experiences in Close Relationships Scale-Revised for use with children and adolescents (ECR-RC) (Brenning, Soenens, Braet, & Bal; 2011), Pediatric Symptom Checklist (PSC; Jellinek, Murphy, Robinson, Feins, Lamb, & Fenton, 1988); and the Pediatric Symptom Checklist Youth Reports (PSC-Y; Jellinek, Murphy, & Burns, 1986).

3.6 Instruments

3.6.1 Demographic questionnaire

The demographic section included: age, gender, domicile, and parents' occupation.

3.6.2 Experiences in Close Relationships Scale-Revised for use with children and adolescents (ECR-RC; Brenning, Soenens, Braet, & Bal, 2011)

Learners completed a child version of the ECR-R (Fraley et al., 2000). This self-report questionnaire was originally designed to assess romantic insecure attachment dimensions but was recently adapted to assess parent-child attachment. The ECR-RC (Brenning et al., 2011) consists of 36 statements about the children's mother. More specifically, 18 anxiety items tap into feelings of fear of abandonment and strong desires for interpersonal merger (e.g., "I worry about being abandoned by my mother") and 18 avoidance items tap into discomfort with closeness, dependence, and intimate self-disclosure (e.g., "I prefer not to show my mother how I feel deep down"). Items are rated on a 7-point scale ranging from "strongly disagree" to "strongly agree". Some of the items of the ECR-RC were reverse scored. Both subscales displayed strong internal consistency and construct and

predictive validity in previous research with both children and adolescents (Brenning et al., 2011). In the present study, the anxiety and avoidance subscales' internal consistencies were estimated at $\alpha_s = 0.855$ and 0.716 , respectively.

Table 2:
Sample Items from the ECR-RC

Item No	Item Content	Scale						
(5)	I wish my mother would love me just as I love her (AV)	1	2	3	4	5	6	7
(9)	I do not often worry that my mother would abandon me (AV)	1	2	3	4	5	6	7
(22)	I am very comfortable feeling close to my mother (AN)	1	2	3	4	5	6	7
(30)	I tell my mother nearly everything (AN)	1	2	3	4	5	6	7

Note: AV = Avoidance, and AN = Anxiety

3.6.3 Pediatric Symptom Checklist (PSC; Jellinek, Murphy, Robinson, Feins, Lamb, & Fenton, 1988); and the Pediatric Symptom Checklist Youth Reports (PSC-Y; Jellinek, Murphy, & Burns, 1986).

The PSC (Jellinek et al., 1988) and the PSC-Y (Jellinek et al., 1986) are widely used by primary care pediatricians as screening tools to identify psychosocial dysfunction of youths as part of routine primary care visits. The PSC is a 35-item questionnaire that measures the children's emotional and behavioural problems as reflected parents' impressions of their children's psychosocial functioning (Jellinek et al., 1986). Jellinek and his colleagues (1988) found that by using a Receiver Operating Characteristic Curve, a PSC cut-off score of 28 has a specificity rate of 68%, a sensitivity rate of 95%, and a false-positive rate of 32% when compared to clinicians' ratings of children's psychosocial dysfunction. It means that 68% of the children identified as PSC-positive will also be identified as impaired by a clinician. Conversely, 95% of the children identified as PSC negative will be identified as unimpaired (Jellinek et al., 1988).

The range of test-retest reliability of the PSC was reported from 0.84 to 0.91. The case/not case classification over time ranges from 83%--87% (Jellinek et al., 1988; Murphy, Arnett, Jellinek, Reede, & Bishop, 1992). Studies conducted by Murphy and Jellinek (1988) and Murphy et al. (1996) also indicated strong internal consistency of the PSC items and highly significant correlations between individual PSC items and positive PSC screening scores.

In summary, the PSC has been found to be an easy to administer screening tool widely used in various settings, programs and states. The psychometric properties of PSC indicate that it is a valid and reliable instrument. As a result, the PSC and PSC-Y have been found to meet the assessment needs of the Clinic-Plus program as screening tools to identify psychosocial dysfunction of youths, hence used in this study. Moreover, the reliability of the full-scale version of the PSC was estimated at $\alpha = 0.844$ in this study. The Chronbach alpha reliabilities of the attention, internalizing and

externalizing subscales were 0.513, 0.642 and 0.0737, respectively, for the present sample. Reliability was also estimated for PSC-Y. The full-scale version reached a reliability level of $\alpha = 0.879$. The attention, internalizing and externalizing subscales reached Chronbach alphas of 0.717, 0.671 and 0.622, respectively.

Table 3a:
Sample items for the PSC

<i>Item No</i>	<i>Item Content</i>	<i>Scale</i>		
16	Fights with other children (E)	Never	Sometimes	Often
13	Feels hopeless (I)	Never	Sometimes	Often
7	Acts as if driven by motor (A)	Never	Sometimes	Often

Note: PSC = pediatric symptom checklist
A = Attention, I = Internalizing, and E = Externalizing

Table 3b:
Sample items for the PSC-Y

<i>Item No</i>	<i>Item Content</i>	<i>Scale</i>		
16	I fight with other children (E)	Never	Sometimes	Often
13	I feel hopeless (I)	Never	Sometimes	Often
7	I act as if driven by motor (A)	Never	Sometimes	Often

Note: PSC-Y = pediatric symptom checklist youth form
A = Attention, I = Internalizing, and E = Externalizing

CHAPTER 4

RESULTS

4.1 Plan for analysis of data

Data was processed using the IBM SPSS Statistics 21.0 (International Business Machines Corporation, 2012). Before conducting analyses, data were checked and cleaned. Missing values were replaced with mean scores for the particular items. Frequencies were used for the description of the sample (see table 1 above). Correlation coefficient analysis was conducted to determine the association between the primary variables of the study, thereafter, regression analysis was conducted to establish if the dimensions of attachment, avoidance and anxiety, would predict problem behaviour, measured in this study as both internalization and externalization.

4.2 Preliminary analysis

In the data some of the items of the ECR-RC were reverse scored, while data was checked for errors. T-test analysis was used to examine the mean differences of scores of the main scales used in the study. As table 5 shows, the mean scores of male and female learners on the scales did not differ ($p > 0.05$, $d_s = 0.05$ — 0.20). Further analysis was then conducted with both males and females in the same group.

Table
Comparisons of mean scores on the main variables of the study

	Gender	\bar{X}	SD	<i>t</i>	<i>p</i>	<i>d^f</i>
Avoidance	Female ^c	53.16	14.539	-0.521	<i>ns</i>	0.09
	Male ^d	54.54	15.789			
Anxiety	Female ^c	45.87	18.661	-1.068	<i>ns</i>	0.19
	Male ^d	49.30	17.784			
PSC-Y Attention (M) ^a	Female ^c	2.14	1.826	0.386	<i>ns</i>	0.07
	Male ^d	2.02	1.863			
PSC-Y Internalize (M) ^a	Female ^c	1.78	1.675	-0.446	<i>ns</i>	0.08
	Male ^d	1.91	1.687			
PSC-Y Externalize (M) ^a	Female ^c	2.95	2.400	0.436	<i>ns</i>	0.08
	Male ^d	2.77	2.288			
PSC-Y attention (L) ^b	Female ^c	1.92	1.700	-0.523	<i>ns</i>	0.09
	Male ^d	2.09	1.975			
PSC-Y internalize (L) ^b	Female ^c	1.77	1.572	-1.149	<i>ns</i>	0.20
	Male ^d	2.13	2.028			
PSC-Y externalize (L) ^b	Female ^c	2.43	2.155	-0.282	<i>ns</i>	0.05
	Male ^d	2.54	2.174			

Note: a = Mother evaluation, b = learner self- evaluation, ^cN = 77, ^dN = 56, e = absolute values

4.3 Main analysis

4.3.1 Attachment, externalizing and internalizing behaviours

Table 6 shows that ECR-R avoidance and ECR-R anxiety are highly related, and the relationship is positive ($p < 0.001$). ECR-R avoidance is positively related to the mother-evaluated PSC externalization ($p < 0.01$), marginally related to mother-evaluated PSC attention ($p < 0.10$), and the relationship with the mother-evaluated PSC internalization was not statistically significant ($p > 0.05$). ECR-R anxiety is not related to all three mother-evaluated PSC-Y subscales ($ps > 0.05$). ECR-R avoidance is associated with PSC-Y internalization as evaluated by the learner ($p < 0.001$), but was not related to learner self-evaluations on the PSCY attention and PSCY externalization subscales ($ps > 0.05$). Similarly, ECR-R anxiety was related to learner self-evaluation on PSC-Y internalization ($p < 0.01$), but was not associated with the learner self-evaluations on the PSC-Y attention and PSC-Y externalization subscales ($ps > 0.05$).

Table
Zero order correlations N =

		1	2	3	4	5	6	7	8	
1.	ECR-R avoidance	<i>r</i>	—							
		<i>p</i>								
2.	ECR-R anxiety	<i>r</i>	0.470	—						
		<i>p</i>	0.000							
3.	PSC attention (M) ^a	<i>r</i>	0.155	0.081	—					
		<i>p</i>	0.072	<i>ns</i>						
4.	PSC internalization (M) ^a	<i>r</i>	0.125	0.029	0.440	—				
		<i>p</i>	<i>ns</i>	<i>ns</i>	0.000					
5.	PSC externalization (M) ^a	<i>r</i>	0.214	0.116	0.419	0.500	—			
		<i>p</i>	0.013	<i>ns</i>	0.000	0.000				
6.	PSC-Y attention (L) ^b	<i>r</i>	0.101	0.111	0.237	0.109	0.101	—		
		<i>p</i>	<i>ns</i>	<i>ns</i>	0.006	<i>ns</i>	<i>ns</i>			
7.	PSC-Y internalization (L) ^b	<i>r</i>	0.319	0.194	0.052	0.135	0.162	0.496	—	
		<i>p</i>	0.000	0.024	<i>ns</i>	<i>ns</i>	0.061	0.000		
8.	PSC-Y externalization (L) ^b	<i>r</i>	0.087	0.036	0.015	0.028	-0.019	0.396	0.490	—
		<i>p</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.000	0.000	

Note: PSC = pediatric symptom checklist, PSC-Y = pediatric symptom checklist youth reports, ECR-R = experiences in close relations revised, a = Mother evaluation, b = learner self- evaluation, *ns* = not statistically significant

4.3.2 Predicting problem behaviours from attachment pattern

Regression analysis was performed to evaluate if attachment could predict problem behaviour. None of the mother evaluated behaviour problems could be predicted by the learner reported attachment. For that reason, the results are not reported. When the learner reported problem behaviours were used as the dependent variable, only the PSC-Y internalization model was significant, and ECR-R avoidance could predict PSC-Y internalization ($p < 0.001$)

Table
Predicting problem behaviour from attachment

Predictor variables	PSC-Y attention (L)			PSC-Y internalization (L)			PSC-Y externalization (L)		
	B	t	Model R (Adjusted R ²)	B	t	Model R (Adjusted R ²)	B	t	Model R (Adjusted R ²)
			0.015 (0.001)†			0.104 (0.091)**			0.008 (-0.007)
ECR-R avoidance	0.063	0.644		0.292**	3.129		0.090	0.918	
ECR-R anxiety	0.082	1.835		0.057	0.612		-0.006	-0.061	

Note: PSC-Y = pediatric symptom checklist youth reports, L = learner self- evaluation; † = 0.10; ** = 0.001

CHAPTER 5

RESULTS

5.1 Introduction

In the present chapter, the researcher discusses the results by relating them to the existing literature. The results are discussed according to the hypotheses that were advanced. The primary variables of attachment and behaviour problems are discussed. The meaning and implications of the results, and the congruence or lack of congruence with the results of other studies are all explored.

This study examined the relationship between attachment and internalizing and externalizing behaviours of school aged children. Furthermore, the study investigated the relationship between parent/guardian reported internalizing and externalizing behaviours with those reported by learners themselves. The results of the study indicate that none of the mother evaluated behaviour problems could be predicted by the learner reported attachment. The learner reported problem behaviours predicted only the PSCY internalization model significantly, and ECR-R avoidance could predict PSC-Y internalization.

5.2 Relationship between attachment and internalizing behaviours

The results of the current study showed a relationship between attachment and internalizing behaviours. In particular, children with avoidant attachment pattern reported higher internalizing behaviours. This finding complements the existing literature. Bowlby (1973) highlighted the unique role of attachment insecurity might play in the development of anxiety. He wrote that insecurely attached children, who presumably lack confidence in their caregiver's ultimate accessibility, were more susceptible to developing fears and anxiety than children who are securely attached.

Children with avoidant attachment have been most consistently linked, at least theoretically, with internalizing problems (Carlson & Sroufe, 1995;

DeKlyen & Greenberg, 2008; Finnegan, Hodges, & Perry, 1996; Manassis, 2011). Attachment theory proposes that manifestations of anxiety or depression originate in children's uncertainty about their caregiver's likely response to attachment related needs. Children in resistant relationships, typically with over involved or inconsistent caregivers, may develop chronic anxiety and an overly dependent attitude toward their caregiver. Their preoccupation with maintaining the attachment figure's attention may come at the expense of exploring the larger world (Bowlby, 1973). Functional dependence on a caregiver in turn engenders anxiety about whether one's needs can be met in the outside world and/or when undertaking new endeavours, leading to a relational style that may be characterized by emotional dependence, regressed behaviour, and social isolation (Moss, Parent, Gosselin, Rousseau, & St-Laurent, 1996).

In line with Bowlby's (1973) observation that internalizing symptoms are associated with caregiver unavailability, internalizing behaviour could also be embedded in patterns of avoidant attachment. As a means of coping with rejection when demonstrating negative effect, children with an avoidant attachment may learn to inhibit emotional arousal, thereby detaching themselves from potential interpersonal threat (Goldberg, 1997; Manassis, 2011). This formulation is consonant with evidence that avoidance involves the inhibition of negative emotion (Cassidy, 1994) and is also associated with physiological recordings indicating that children in avoidant relationships are aroused and distressed by their mothers' departures during the Strange Situation (Hertsgaard, Gunnar, Erickson, & Nachmias, 1995; Spangler & Grossmann, 1993), even though they show no behavioural signs of distress.

Evidence linking attachment to internalizing symptoms suggests that there is a direct effect of attachment security on problem behaviours, such that children are classified as securely attached have fewer symptoms of internalizing behaviours at school age in both high and low risk samples (Anan & Barnett, 1999; Booth, Rose-Mcknison, & Rubin, 1994; Dallaire & Weinraub, 2005; Goldberg, Gotowiec & Sommons, 1995). Furthermore, several studies suggest that there is a significant association between

insecure attachment and internalizing behaviour (Bohlin, Hagekull, and Rydell, 2000; Brumariu and Kerns, 2010; Cicchetti, Rogosch, & Toth, 1998; Manassis, Bradley, Goldberg, Hood, & Swinson, 1995).

5.3 **Relationship between attachment and externalizing behaviours**

The results of the current study showed that there is no relationship between attachment and externalizing behaviours. That is, externalizing behaviours could not be predicted from the learners' attachment pattern (Avoidance and Anxiety). The finding is inconsistent with attachment theory; Bowlby (1975) found a strong relationship between attachment failure and externalizing behaviour problems. Studies found that attachment not only influences personality development, but the development of symptoms too (Baas, Bond, & Sharpe, 1999; Bandixen, Muus, & Schei, 1994; Barsky, Barnett, & Cleary, 1994; Green, Flowe-Valencia, Rosenblum, & Tait, 2001; Sansone, Wiederman, & Sansone, 2001).

While the hypothesized findings linking attachment avoidance and externalizing behaviours are not supported, and are inconsistent with some literature, they are not surprising. This is because previous studies also found inconsistent results for externalizing behaviour across attachment patterns. Moss, Rousseau, Parent, St-Laurent and Saintonge (1998) found that insecure-avoidant attachment was linked with internalizing behaviour, while insecure-ambivalent attachment was linked with externalizing behaviour, which is the opposite relationship that the present study hypothesized. Moss and Colleagues later found that avoidance was related to externalizing behaviour, but was also the only classification related to internalizing behaviour (Moss, Cyr, & Dubois, 2004).

However, in certain circumstances following or clinging to the attachment figure may occur, and also calling or crying which are likely to elicit care giving (Morgan, 1999). This might be the case with the participants which might have caused them not to experience some of the problematic attachment behaviours as abnormal or to be helpful in stimulating care giving

behaviours.

Aggression, temper tantrums, impulsivity, conflict with others and uncooperativeness might be viewed by parent participants as attention (or care) seeking behaviours and therefore regarded as somewhat normal and helpful by participant learners which would make it difficult to have a high score on externalizing behaviours. Patterson (1982) emphasizes the role of coercive cycles in the development and maintenance of problem behaviour. He proposes that harsh, inconsistent parenting and noncompliant, aggressive child behaviour become mutually reinforcing over time, which serves to solidify a coercive interaction pattern between parent and child.

The results partially contradict the existing research. Literature supported a relationship between attachment and externalizing behaviour in childhood, finding a correlation between insecure attachments in childhood and externalizing behaviour concurrently. Moss, Bureau, Cyr, Mongeau and St-Laurent (2004) found that mothers of disorganized and insecure-avoidant children at 3 years old reported higher externalizing symptoms than did mothers of secure children.

The difference between avoidant children and other insecure attachments was supported in the Finnegan, Hodges, and Perry study (1996) of third through seventh graders, which showed avoidant, but not preoccupied (e.g. ambivalent) coping, to predict externalizing problems in both boys and girls. In a study which examined attachment and internalizing and externalizing behaviour problems in nine through twelve year olds (Roelofs et al., 2006), insecurely attached children displayed higher scores on all internalizing and externalizing symptoms than securely attached children.

The results of the study indicate that avoidance is positively related to the mother evaluated externalizing behaviours. This finding complements the view of Ladnier and Massanari (2000) which indicate that that behaviours characteristic of avoidant children are similar to symptoms of ADHD, but failed to produce evidence that ADHD occurs with greater frequency among

children with an avoidant attachment style. Alternatively, another study found that the type of attachment insecurity that was present in those children diagnosed with ADHD was consistent with an ambivalent attachment style (Clarke et al., 2002). Smith (1994) pointed a phenomenon he referred to as “dis-attachment” that results from a failure of the mother to bond with a child who is very demanding and difficult to comfort. Almost all of the children Smith studied who experienced this dis-attachment also exhibited symptoms of ADHD.

5.4 Conclusions, limitations and recommendations

5.4.1 Conclusion

The current study highlights that there is no significant difference in children’s attachment patterns with regard to the development of externalizing behaviours. Efforts should be made to educate children and parents on what is developmentally appropriate and not, and parenting styles together with their impact on both parent-child interaction and later consequences. In conclusion the results of the current study indicate that only avoidance can predict the development of internalizing behaviours.

5.4.2 Limitations of the study

Sample size is one of the limitations of the study. Hundred and thirty five (135) participants is not adequate number to represent all the learners in Mankweng area. Another limitation of the study is the researcher’s failure to include parenting as a factor in the study. The variable might have also influenced the findings. That is, the manner in which learners are parented by their caregiver’s influence how they behave. For example, punitive parenting on its own has major implications on the development of internalizing and externalizing behaviours. That is, a parent/guardian who inappropriately responds to the child’s distress with harsh discipline may cause the child to withdraw, or avoid the parent in order to prevent the parent’s punitive responses or the child might even resort to agree with

everything the parent says or does.

5.4.3 **Recommendations**

Based on the above mentioned limitations it is recommended that the study be conducted on a relatively larger sample that would reasonably represent Mankweng learners. It would also be interesting to study the role of parenting as a factor. Perhaps study the role of attachment as a risk or protective factor rather than directly being associated with internalizing and externalizing behaviours. It may be that adequate and supportive parenting buffers the effect of punitive discipline; whereas insecure attachment may exacerbate the negative effects of harsh parenting on the development of internalizing and externalizing behaviours.

78, 125-174.

- Anan, R. M., & Barnett, D. (1999). Perceived social support mediates between prior attachment and subsequent adjustment: A study of urban African American children. *Developmental Psychology, 35*, 1210-1222.
- Angold, A., Erkanli, A., Silberg, J., Eaves, L., & Costello, E. J. (2002). Depression scale scores in 8–17-year-olds: Effects of age and gender. *Journal of Child Psychology & Psychiatry & Allied Disciplines, 43*, 1052–1063.
- Ansary, N. S., & Luthar S. S. (2009). Distress and academic achievement among adolescents of affluence: A study of externalizing and internalizing problem behaviours and school performance. *Development & Psychopathology, 21*, 319–341.
- Arsenio, W., Shea, T., & Sacks, B. (2000). Juvenile offenders and comparison adolescents conceptions of the emotional consequences of victimization: Relations with attachment and empathy. *Journal of Social & Personal Relationships, 7*, 147-178.
- Babinski, L. M., Hartsough, C. S., & Lambert, N. M. (1999). Childhood conduct problems, hyperactivity-impulsivity, and inattention as predictors of adult criminal activity. *Journal of Child Psychology & Psychiatry, 40*, 347–355.
- Barber, B. K., & Olsen, J. A. (1997). Socialization in context: Connection, regulation, and autonomy in the family, school, and neighborhood, and with peers. *Journal of Adolescent Research, 12*, 287–315.
- Barkley, R. S., Fischer, M., Smallish, L., & Fletcher, K. (2004). Young adult follow-up of hyperactive children: Antisocial activities and drug use. *Journal of Child Psychology & Psychiatry, 45*, 195–211.
- Barsky, A. J., Wool, C., Barnett, M. C., & Cleary, P. D. (1994). Histories of childhood trauma in adult hypochondriacal patients. *American Journal of Psychiatry, 151*,

397–401.

- Bates, J. E., Pettit, G. S., Dodge, K. A., & Ridge, B. (1998). Interaction of temperamental resistance to control and restrictive parenting in the development of externalizing behaviour. *Developmental Psychology*, 34, 982–995.
- Beardslee, W. R., Versage, E. M., & Gladstone, T. G. (1998). Children of affectively ill parents: A review of the past 10 years. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37, 1134–1141.
- Belsky, J. (1997). Variation in susceptibility to environmental influences: An evolutionary argument. *Psychological Inquiry*, 8, 182–186.
- Belsky, J., Hsieh, K., Crnic, K. (1998). Mothering, fathering, and infant negativity as antecedents of boys' externalizing problems and inhibition at age 3 years: Differential susceptibility to rearing experience? *Development & Psychopathology*, 10, 301–319.
- Belsky, J., Woodworth, S., & Crnic, K. (1996). Troubled family interaction during toddlerhood. *Development & Psychopathology*, 8, 477–495.
- Bennett, M. E., McCrady, B., Johnson, V., & Pandina, R. J. (1999). Problem drinking from young adulthood to adulthood: Patterns, predictors, and outcomes. *Journal Studies of Alcohol*, 60, 605–614.
- Best, K. M., Hauser, S. T., & Allen, J. P. (1997). Predicting young adult competencies: Adolescent era parent and individual influences. *Journal of Adolescent Research*, 12, 90–112.
- Biederman, J., Faraone, S. V., & Keenan, K. (1990). Family-genetic and psychosocial risk factors in DSM-III attention deficit disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 29, 526-533.

- Bohlin, G., Hagekull, B., & Rydell, A. M. (2000). Attachment and social functioning: a longitudinal study from infancy to middle childhood. *Social Development*, 9, 24-39.
- Bongers, I. L., Koot, H. M., van der Ende, J., & Verhulst, F. C. (2003). The normative development of child and adolescent problem behaviour. *Journal of Abnormal Psychology*, 112, 179–192.
- Bookwala, J., & Zdaniuk, B. (1998). Adult attachment styles and aggressive behaviour within dating relationships. *Journal of Social & Personal Relationships*, 15, 175-190.
- Booth C. L., Rose-Krasnor, L., McKinnon, J., & Rubin, K. H. (1994). Predicting social adjustment in middle childhood: The role of preschool attachment security and maternal style. *Social Development*, 3, 189-204.
- Bosmas, G., Braet, C., Van Leeuwen, K., & Beyers, W. (2006). Do parenting behaviours predict externalizing behaviour in adolescence, or is attachment the neglected 3rd factor? *Journal of Youth & Adolescence*, 35, 373-383.
- Bosmans, G., Braet, C., & Van Vlierberghe, L. (2010). Attachment and symptoms of psychopathology: Early maladaptive schemas as a cognitive link? *Clinical Psychology & Psychotherapy*, 17, 374-385.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York, NY: Basic Books.
- Bowlby, J. (1997). *The making and breaking of affectional bonds*. London: Tavistock.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York, NY: Basic Books.
- Brenning, K., Soenens, B., Braet, C., & Bosmans, G. (2011). An adaptation of the experiences in close relationships scale-revised for use with children and

- adolescents. *Journal of Social & Personal Relationships*, 28, 1048–1072.
- Bretherton, I. (1995). Bowlby's legacy to developmental psychology. *Child Psychiatry & Human Development*, 28(1), 33-43.
- Bretherton, I. (1991). The roots and growing points of attachment theory. In C. M. Parkes, J. R. Ornstein, & C. Zahn-Waxler (Eds.), *Attachment across the life cycle* (pp. 9-32). London: Routledge.
- Broidy, L. M., Nagin, D. S., Tremblay, R. E., Bates, J. E., Brame, B., Dodge, K. A. (2003). Developmental trajectories of childhood disruptive behaviours and adolescent delinquency: A six site, cross-national study. *Developmental Psychology*, 39, 222-245.
- Brophy, M., & Dunn, J. (2002). What did mummy say? Dyadic interactions between young "hard to manage" children and their mothers. *Journal of Abnormal Child Psychology*, 30, 103–112.
- Brumariu, L. E., & Kerns, K. A. (2010). Parent-child attachment and internalizing symptoms in childhood and adolescence: A review of empirical findings and future directions. *Developmental Psychopathology*, 22, 177-203.
- Buehler, C., Anthony, C., Krishnakumar, A., & Stone, G. (1997). Interparental conflict and youth problem behaviours: A meta-analysis. *Journal of Child & Family Studies*, 6, 223–247.
- Burke, L. (2003). The impact of maternal depression on familial relationships. *International Review of Psychiatry*, 15, 243–255.
- Burke, J. D., Loeber, R., Lahey, B. B., & Rathouz, P. J. (2005). Developmental transitions among affective and behavioural disorders in adolescent boys. *Journal of Child Psychology & Psychiatry*, 46, 1200–1210.
- Burks V. S., Dodge K. A., & Price J. M. (1995). Models of internalizing outcomes of

- Carlson, E. A. (1998). A prospective longitudinal study of attachment disorganization/disorientation. *Child Development*, 64, 1107-1128.
- Carlson, E.A., & Seroufe, L.A. (1995). The contribution of attachment theory to developmental psychopathology. In D. Cicchetti & D. Cohen (Eds.), *Developmental processes and psychopathology: Vol. 1. Theoretical perspectives and methodological approaches* (pp. 581-617). New York, NY: Cambridge University.
- Caspi, A., Moffitt, T. E., Newman, D. L., & Silva, P. A. (1996). Behavioural observations at age 3 years predict adult psychiatric disorders. Longitudinal evidence from a birth cohort. *Archives of General Psychiatry*, 53, 1033-9.
- Caspi, A., Henry, B., McGee, R. O., Moffitt, T. E., & Silva, P. A. (1995). Temperamental origins of child and adolescent behaviour problems: From age 3 to age 15. *Child Development*, 66, 55-68.
- Cassidy, J. (1999). The nature of the child's ties. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (pp. 3-20). New York, NY: Guilford.
- Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. *Monographs of the Society for Research in Child Development*, 59, 228-249.
- Catanzaro, A., & Wei, M. (2010). Adult attachment, dependence, self-criticism, and depressive symptoms: A test of a meditational model. *Journal of Personality*, 78, 1135-1162.
- Cicchetti, D., Rogosch, F. A., & Toth, S. L. (1998). Maternal depressive disorder and contextual risk: Contributions to the development of attachment insecurity and behaviour problems in toddlerhood. *Development Psychopathology*, 10, 283-300.

- Chassin, L., Pitts, S. C., & Prost, J. (2002) Binge drinking trajectories from adolescence to emerging adulthood in a high-risk sample: predictors and substance abuse outcomes. *Journal of Consulting & Clinical Psychology, 70*, 67–78.
- Chassin, L., Hussong, A., Barrera, M., Molina, J. R., Trim, B. S. G., & Ritter, R. (2004) In: R. M. Lerner, & L. Steinberg (Eds.), *Handbook of Adolescents Psychology. 2.* (pp. 665-96). Hoboken, NJ: Wiley.
- Chassin, L., & Ritter, J. (2001). Vulnerability to substance use disorders in childhood and adolescence. In R. E. Ingram, & J.M. Price (Eds.), *Vulnerability to psychopathology: Risk across the lifespan.* (pp. 107-134). New York, NY: Guilford.
- Chassler, L. (1997). Understanding anorexia nervosa from an attachment Perspective. *Clinical Social Work Journal, 25*, 407 – 423.
- Chen, X., Rubin, K. H., & Li, D. (1997). Relation between academic achievement and social adjustment: Evidence from Chinese children. *Developmental Psychology, 33*, 518–525.
- Clarke, L., Ungerer, J., Chahoud, K., Johnson, S., & Stiefel, I. (2002). Attention deficit hyperactivity disorder is associated with attachment insecurity. *Clinical Child Psychology & Psychiatry, 7*, 179-198.
- Coie, J., Terry, R., Lenox, K., Lochman, J., & Hyman, C. (1995). Childhood peer rejection and aggression as predictors of stable patterns of adolescent disorder. *Development & Psychopathology, 7*, 697–713.
- Colder, C. R., Mott, J. A., & Berman, A. S. (2002). The interactive effects of infant activity level and fear on growth trajectories of early childhood behaviour problems. *Development & Psychopathology, 14*, 1–23.
- Colman, A. M. (2003). *Oxford dictionary of psychology.* Oxford: Oxford University.

- Conger, K. J., & Conger, R. D. (1994). Differential parenting and change in sibling differences in delinquency. *Journal of Family Psychology*, 8, 287–302.
- Côté, S. M., Vaillancourt, T., LeBlanc, J. C., Nagin, D. S., & Tremblay, R. E. (2006). The development of physical aggression from toddlerhood to pre-adolescence: A nationwide longitudinal study of Canadian children. *Journal of Abnormal Child Psychology*, 34, 71–85.
- Cummings, E. M., & Davies, P. (1994). *Children and marital conflict: The impact of family dispute and resolution*. New York, NY: Guilford.
- Cummings, E. M., & Davies, P. T. (1994). Maternal depression and child development. *Journal of Child Psychology & Psychiatry*, 35, 73–112.
- Cummings, E. M., Keller, P. S., & Davies, P. T. (2005). Towards a family process model of maternal and paternal depressive symptoms: Exploring multiple relations with child and family functioning. *Journal of Child Psychology & Psychiatry*, 46, 479–489.
- Dallaire, D. H., & Weinraub, M. (2007). Infant-mother attachment security and children's anxiety and aggression at first grade. *Journal of Applied Developmental Psychology*, 28, 477-492.
- Dallaire, D. H., & Weinraub, M. (2005). Predicting children's separation anxiety at age 6: The contributions of infant-mother attachment security, maternal sensitivity and maternal separation anxiety. *Attachment & Human Development*, 7, 393-408.
- Davies, P. T., & Windle, M. (2001). Interparental discord and adolescent adjustment trajectories: The potentiating and protective role of intrapersonal attributes. *Child Development*, 72, 1163– 1178.
- Deater-Deckard, K., Ivy, L., & Petrill, S. A. (2006). Maternal warmth moderates the

- Doron, G., & Moulding, R. K. (2009). Adult attachment insecurities are related to obsessive compulsive phenomena. *Journal of Social & Clinical Psychology*, 28, 1022-1049.
- Dozier, M., & Tyrell, C. (1998). The role of attachment in therapeutic relationships. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 221-248). New York, NY: Guilford.
- Duncan, G. J., Dowsett, C. J., Claessens A., Magnuson, K., Huston, A. C., & Klebanov, P. (2007). School readiness and later achievement. *Developmental Psychology*, 43, 1428–1446.
- Eddy, J. M., & Chamberlain, P. (2000). Family management and deviant peer association as mediators of the impact of treatment condition on youth antisocial behaviour. *Journal of Consulting & Clinical Psychology*, 68, 857–863.
- Ein-Dor, T., Doron, G., & Solomon, Z. (2010). Together in pain: attachment-related dyadic processes and posttraumatic stress disorder. *Journal of Counseling Psychology*, 57, 317-327.
- Fagan, A. A., & Najman, J. M. (2003). Associations between early childhood aggression and internalizing behaviour for sibling pairs. *Journal of the American Academy of Child & Adolescent Psychiatry*, 42, 1093–1100.
- Fagot, B. I., & Kavanagh, K. (1990). The prediction of antisocial behaviour from avoidant attachment classifications. *Child Development*, 61, 864-873.
- Farrington, D., Loeber, R., & van Kammen, W. B. (1990). Long-term criminal outcomes of hyperactivity impulsivity- attention deficit and conduct problems in childhood. In L. N. Robins, & M. Rutter (Eds.), *Straight and devious pathways from childhood to adulthood*. (pp. 62-81). New York, NY: Cambridge University.

- Feinberg, M., & Hetherington, E. M. (2001). Differential parenting as a within-family variable. *Journal of Family Psychology, 15*, 22–37.
- Fergusson, D. M., & Lynskey, M. T. (1998). Conduct problems in childhood and psychosocial outcomes in young adulthood: a prospective study. *Journal of Emotional & Behavioural Disorders, 6*, 2–18.
- Fergusson, D. M., Horwood, L. J., & Ridder, E. J. (2005). Show me the child at seven II: childhood intelligence and later outcomes in adolescence and young adulthood. *Journal of Child Psychology & Psychiatry, 46*, 850–8.
- Finnegan, R. A., Hodges, E. V. E., & Perry, D. G. (1996). Preoccupied and avoidant coping during childhood. *Child Development, 67*, 1318-1328.
- Finzi, R., Ram, A., Har-Even, D., Shnit, D., & Weizman, A. (2001). Attachment styles and aggression in physically abused and neglected children. *Journal of Youth & Adolescence, 30*, 769-786.
- Fonagy, P. (1999). Psychoanalytic theory from the viewpoint of attachment theory and research. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment theory and research* (pp. 595-624). New York, NY: Guilford.
- Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology, 4*, 132–154.
- Galambos, N. L., Baker, E. T., & Almeida, D. M. (2003). Parents do matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development, 74*, 578– 594.
- Garber, J., Robinson, N. S., & Valentiner, D. (1997). The relation between parenting and adolescent depression: Self-worth as a mediator. *Journal of Adolescent Research, 12*, 12–33.

- Gardner, F. (1987). Positive interaction between mothers and conduct problem children: Is there training for harmony as well as fighting? *Journal of Abnormal Child Psychology*, *15*, 283–293.
- Garmezy, N. (1983). Stressors of childhood. In N. Garmezy & M. Rutter (Eds.), *Stress, coping and development in children* (pp. 43-84). New York, NY: McGraw-Hill.
- Gelfand, D. M., & Teti, D. M. (1990). The effects of maternal depression on children. *Clinical Psychology Review*, *10*, 320–354.
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviours and associated child behaviours and experiences: A meta-analytic and theoretical review. *Psychological Bulletin*, *182*, 539-579.
- Ginsburg, G. S., Siqueland, L., Masia-Warner, C., & Hedtke, K. A. (2004). Anxiety disorders in children: Family matters. *Cognitive & Behavioural Practice*, *11*, 28–43.
- Goldberg, S., Gotowiec, A., & Simmons, R. J. (1995). Infant-mother attachment and behaviour problems in healthy and chronically ill preschoolers. *Development & Psychotherapy*, *7*, 267-282.
- Goldberg, S. (1997). Attachment and childhood behaviour problems in normal, at-risk and clinical samples. In L. Attkinsons & K. Zuckler (Eds.), *Attachment and psychopathology* (pp. 171-195). New York, NY: Guilford.
- Goldsmith, H. H., & Lemery, K. S. (2000). Linking temperamental fearfulness and anxiety symptoms: A behaviour-genetic perspective. *Biological Psychiatry*, *48*, 1199–1209.
- Gomez, L. (1997). *An introduction to object relations*. London: Free Association.
- Gormley, B., & McNeil, D. E. (2010). Adult attachment orientations, depressive

- symptoms, anger, and self-directed aggression by psychiatric patients. *Cognitive Therapy & Research*, 34, 272-281.
- Goodman, S. H., & Brumley, H. E. (1990). Schizophrenic and depressed mothers: Relational deficits in parenting. *Developmental Psychology*, 26, 31–39.
- Green, C. R., Flowe-Valencia, H., Rosenblum, L., & Tait, A. R. (2001). The role of childhood and adulthood abuse among women presenting for chronic pain management. *Clinical Journal of Pain*, 17, 359–364.
- Greenberg, M. T. (1999). Attachment and psychopathology in childhood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 469–496). New York, NY: Guilford
- Greenberg, M. T., Speltz, M. L., DeKlyen, M., & Endriga, M. C. (1991). Attachment security in preschoolers with and without externalizing problems: A replication. *Development & Psychopathology*, 3, 413–430.
- Greenberg, M. T., & Speltz, M. L. (1988). Contributions of attachment theory to the understanding of conduct problems during the preschool years. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment* (pp. 177-218). Hillsdale, NJ: Erlbaum.
- Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: a cognitive-contextualist framework. *Psychological Bulletin*, 108, 267-290.
- Gullestad, S. E. (2001). Attachment theory and psychoanalysis: Controversial issues. *Scandinavian Psychoanalytic Review*, 24, 3-16.
- Hammen, C., & Rupolph, K. D. (2003). Childhood mood disorders. In E. J. Mash & R. A. Barkley (Eds.). *Child psychopathology* (2nd ed.)(pp. 233-278). New York, NY: Guilford.
- Hay, D. F., Pawlby, S., Angold, A., Harold, G. T., & Sharp, D. (2003). Pathways to

violence in the children of mothers who were depressed postpartum. *Developmental Psychology*, 39, 1083–1094.

Hechtman, L., Weiss, G., & Perlman, T. (1984). Hyperactive as young adults: Past and current substance abuse and antisocial behaviour. *American Journal of Orthopsychiatry*, 54, 415–425.

Heller, T. L., Baker, B. L. (2000). Maternal negativity and children's externalizing behaviour. *Early Education & Development*, 11, 483–498.

Hemphill, S., & Sanson, A. (2001). Matching parenting to child temperament. *Family Matters*, 59, 42–47.

Hertsgaard, I., Gunnar, M., Erickson, M. F., & Nachimias, M. (1995). Adrenocortical responses to the strange situation in infants with disorganized/disoriented attachment relationships. *Child Development*, 66, 1100-1106.

Hops, H., Andrews, J. A., Duncan, S. C., Duncan, T. E., & Tildesley, E. (2000). Adolescent drug use development: A social interactional and contextual perspective. In A. J. Sameroff, & M. Lewis (Eds.), *Handbook of developmental psychopathology* (2nd ed.)(pp. 589–605). New York, NY: Kluwer Academic/Plenum.

Hops, H., Davis, B., & Lewin, L. (1999). The development of alcohol and other substance use: A gender study of family and peer context. *Journal on Studies of Alcohol*, 13, 22–31.

International Business Machines Corporation. (2012). *IBM SPSS Statistics*. Armonk, NY: Author.

Illing, V., Tasca, G. A., & Balfour, L. (2010). Attachment insecurity predicts eating disorder symptoms and treatment outcomes in a clinical sample of women. *Journal of Nervous & Mental Disease*, 198, 653-659.

- Ingoldsby, E., & Shaw, D. S. (2002). Neighborhood contextual factors and the onset and progression of early-starting antisocial pathways. *Clinical Child & Family Psychology Review*, 5, 21–55.
- Jessor, R., & Jessor, S. L. (1977). Adolescent development and the onset of drinking: a longitudinal study. *Journal of Studies on Alcohol*, 36, 27–51.
- Jellinek, M. S. (1986). Brief child psychiatric evaluation: Parental satisfaction and compliance. *Journal of the American Academy of Child Psychiatry*, 25(2), 266–268.
- Jellinek, M. S., Murphy, J. M., & Burns, B. (1986). Brief psychosocial screening in outpatient pediatric practice. *Journal of Pediatrics*, 109, 371–378.
- Jellinek, M. S., Murphy, J. M., Robinson, J., Feins, A., Lamb, S., & Fenton, T. (1988). The Pediatric Symptom Checklist: Screening school-age children for psychosocial dysfunction. *Journal of Pediatrics*, 112, 201–209.
- Johnson, V., & Pandina, R. J. (1991). Effects of the family environment on adolescent substance use, delinquency, and coping styles. *American Journal of Drug & Alcohol Abuse*, 17, 71–88.
- Kagan, J., Snidman, N., Zentner, M., & Peterson, E. (1999). Infant temperament and anxious symptoms in school age children. *Development & Psychopathology*, 11, 209–224.
- Kaplan, H. I., & Sadock, B. J. (2008). *Synopsis of psychiatry: Behavioural sciences/clinical psychiatry*, 8th Ed. New York, NY: Lippincott Williams & Wilkins.
- Kates, W. G., Johnson, R. L., Rader, M. W., & Strieder, F. W. (1991). Whose child is this? Assessment and treatment of children in foster care. *American Journal of Orthopsychiatry*, 61, 584–591.

- Keiley, M. K., Howe, T. R., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2001). The timing of child physical maltreatment: A cross-domain growth analysis of impact on adolescent externalizing and internalizing problems. *Development & Psychopathology*, 13, 891–912.
- Keiley, M. K., Lofthouse, N., Bates, J. E., Dodge, K. A., & Pettit, G. S. (2003). Differential risks of co-varying and pure components in mother and teacher reports of externalizing and internalizing behaviour across ages 5 to 14. *Journal of Abnormal Child Psychology*, 31, 267–283.
- Kendler, K. S., Jacobson K., Myer, J. M., & Eaves, L. J. (2008). A genetically informative developmental study of the relationship between conduct disorder and peer deviance in males. *Psychological Medicine*, 38, 1001–1011.
- Kochanska, G., Tjebkes, T. L., & Forman, D. R. (1998). Children's emerging regulation of conduct: Restraint, compliance, and internalization from infancy to the second year. *Child Development*, 69, 1378-1389.
- Lacourse, E., Nagin, D. S., Vitaro, F., Côté, S. M., Arseneault, L., & Tremblay, R. E. (2006). Prediction of early-onset deviant peer group affiliation: A 12-year longitudinal study. *Archives of General Psychiatry*, 63, 562–569.
- Ladnier, R. D., & Massanari, A. E. (2000). Treating ADHD as attachment deficit disorder. In T. M. Levy (ed.), *Handbook of attachment interventions* (pp. 27-65). San Diego: Academic.
- Lahey, B. B., Loeber, R., Burke, J., Rathouz, P. J., & McBurnett, K. (2002). Waxing and waning in concert: Dynamic comorbidity of conduct disorder with other disruptive and emotional problems over 7 years among clinic-referred boys. *Journal of Abnormal Psychology*, 111, 556–567.
- Lapalme, M., Hodgins, S., & LaRoche, C. (1997). Children of parents with bipolar disorder: A meta-analysis of risk for mental disorders. *Canadian Journal of Psychiatry*, 42, 623–631.

- Leve, L. D., Kim, H. K., & Pears, K. C. (2005). Childhood temperament and family environment as predictors of internalizing and externalizing trajectories from ages 5 to 17. *Journal of Abnormal Child Psychology*, 33, 505–520.
- Loeber, R., & Dishion, T. (1983). Early predictors of male delinquency: A review. *Psychological Bulletin*, 93, 68-99.
- Loeber, R., Burke, J. D., Lahey, B. B., Winters, A., & Zera, M. (2000). Oppositional defiant and conduct disorder: A review of the past 10 years, part I. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39, 1468–1484.
- Maguin, E., & Loeber, R. (1996). Academic performance and delinquency. *Crime and Justice: A Review of Research*, 20, 1–41.
- Main, M., & Goldwyn, R. (1984). Predicting rejection of her infant from mother's representation of her own experience: Implications for the abused-abusing intergenerational cycle. *Child Abuse & Neglect*, 8, 203-217.
- Main, M., & Hasse, E. (1990). Lack of mourning in adulthood and its relationship to infant disorganization: Some speculations regarding casual mechanisms. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research and intervention (pp.161-182)*. Chicago: University of Chicago.
- Main, M., & Weston, D.R. (1981). The quality of toddler's relationship to mother and father: related to conflict behaviour and readiness to establish new relationships. *Child Development*, 52, 932-940.
- Manassis, K., Bradley, S., Goldberg, S., Hood, J., Swinson, R. (1995). Behavioural inhibition, attachment, and anxiety in children of mothers with anxiety disorders. *Canadian Journal of Psychiatry*, 40, 87-92.
- Manassis, K. (2011). Child-parent relations: attachment and anxiety disorders. In W. K. Silverman, & A. P. Field (eds.), *Anxiety disorders in children and*

adolescents (pp. 280-298). Cambridge: Cambridge University.

- Marchand, J. F., Hock, E., & Widaman, K. (2002). Mutual relations between mothers' depressive symptoms and hostile-controlling behaviour and young children's externalizing and internalizing behaviour problems. *Parenting: Science & Practice, 2*, 335–353.
- Marshall, J., & Watt, P. (1999). *Child Behaviour Problems: A literature review of the size and nature of the problem and prevention interventions in childhood*. Perth, Western Australia: The inter agency committee on children's futures.
- Masten, A. S., Hubbard, J. J., Gest, S. D., Tellegen, A., Garmezy, N., & Ramirez, M. (1999). Competence in the context of adversity: Pathways to resilience and maladaptation from childhood to late adolescence. *Development & Psychopathology, 11*, 143–169.
- Maughan, B., Rowe, R., Loeber, R., & Stouthamer-Loeber, M. (2003). Reading problems and depressed mood. *Journal of Abnormal Child Psychology, 31*, 219–229.
- Mayzer, R., Puttler, L. I., Wong, M. M., Fitzgerald, H. E., & Zucker, R. A. (2002). Predicting early onset of first alcohol use from behaviour problem indicators in early childhood. *Alcoholism: Clinical & Experimental Research, 27*:65A.
- McGuire, S., Dunn, J., Plomin, R. (1995). Maternal differential treatment of sibling and children's behavioural problems: A longitudinal study. *Development & Psychopathology, 7*, 515–528.
- McLeod, J., & Shanahan, M. (1996). Trajectories of poverty and children's mental health. *Journal of Health & Social Behaviour, 37*, 207–220.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. NY: Guilford.

- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behaviour: A developmental taxonomy. *Psychological Review*, 100, 674–701.
- Moffitt, T. E., Caspi, A., Dickson, N., Silva, P., & Stanton, W. (1996). Childhood-onset versus adolescent-onset antisocial conduct problems in males: Natural history from ages 3 to 18 years. *Development & Psychopathology*, 8, 399–424.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behaviour: A developmental taxonomy. *Psychological Review*, 100, 674-701.
- Morgan, J. Y. (1999). *The application of attachment theory to a psychotherapy case*. Unpublished dissertation, Rand Afrikaans University, Johannesburg, South Africa.
- Moss, E., Cyr, C., & Dubois-Comtois, K. (2004). Attachment at early school age and developmental risk: Examining family contexts and behaviour problems of controlling-caregiving, controlling-punitive, and behaviourally disorganized children. *Developmental Psychology* 40, 519-532.
- Moss, E., Bureau, J.F., Cyr, C., Mongeau, C., & St-Laurent, D. (2004). Correlates of attachment at age 3: Construct validity of the preschool attachment classification system. *Developmental Psychology*, 40, 323-334.
- Moss, E., Parent, S., Gosselin, C., Rousseau, D., & St-Laurent, D. (1996). Attachment and teacher-reported behaviour problems during the preschool-age period. *Development & Psychopathology*, 8, 511-525.
- Moss, E., Rousseau, D., Parent, S., St-Laurent, D., & Sainonge, J. (1998). Correlates of attachment at school age: Maternal reported stress, mother-child interaction, and behaviour problems. *Child Development*, 69, 1390-1405.
- Moss, E., Smolla, N., Cyr, C., Dubois-Comtois, K., Mazzarello, T., & Berthiaume, C. (2006). Attachment and behaviour problems in middle childhood as reported

- by adult and child informants. *Development & Psychopathology*, 18, 425–444.
- Munson, J. A., McMahon, R. J., & Spieker, S. J. (2001). Structure and variability in the developmental trajectory of children's externalizing problems: Impact of infant attachment, maternal depressive symptomatology, and child sex. *Development & Psychopathology*, 13, 277–296.
- Muris, P., & Merckelbach, H. (1998). Perceived parental rearing behaviour and anxiety disorders symptoms in normal children. *Personality & Individual Differences*, 25, 1199–1206.
- Muris, P., Meesters, C. M. G. Van Brakel, A. (2003). Assessment of anxious rearing behaviours with a modified version of "Egna Minnen Bestr"affende Uppfostran" questionnaire for children. *Journal of Psychopathology & Behavioural Assessment*, 25, 229–237.
- Muris, P., Meesters, C. M. G., Merckelbach, H., & Hulslenbeck, P. (2000). Worry in children is related to perceived parental rearing and attachment. *Behaviour Research & Therapy*, 38, 487–497.
- Murphy, J., Arnett, H., Jellinek, M. S., Reede, J. Y., & Bishop, S. J. (1992). Routine psychosocial screening in pediatric practice: A naturalistic study with the pediatric symptom checklist. *Clinical Pediatrics*, 31, 660-667.
- Murphy, J. M., & Jellinek, M. (1988). Screening for psychosocial dysfunction in economically disadvantaged and minority group children: further validation of the Pediatric Symptom Checklist. *American Journal of Orthopsychiatry*, 58, 450-6.
- Murphy, J. M., Ichinose, C., Hicks, R. C., Kingdon, D., Crist-Whitzel, J., Jordan, P., Feldman, G., & Jellinek, M. S. (1996). Utility of the Pediatric Symptom checklist as a psychosocial screen to meet the federal Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) standards: A pilot study. *Journal of Pediatrics*, 129, 864-869.

- NICHD Early Child Care Research Network (1999). Chronicity of maternal depressive symptoms, maternal sensitivity, and child functioning at 36 months. *Developmental Psychology*, 35, 1297–1310.
- Oland, A., & Shaw, D.S. (2005). Pure vs. co-occurring externalizing and internalizing symptomatology in children: The potential role of socio-developmental milestones. *Clinical Child & Family Psychology Review*, 8, 247–270.
- Ono, Y., Ando, J., Onoda, N., Yoshimura, K., Momose, T., Hirano, M., & Kanba, S. (2002). Dimensions of temperament as vulnerability factors in depression. *Molecular Psychiatry*, 7, 948–953.
- Owens, E. B., & Shaw, D. S. (2003). Predicting growth curves of externalizing behaviour across the preschool years. *Journal of Abnormal Child Psychology*, 31, 575–590.
- Park, J. H., Essex, M. J., Zahn-Waxler, C., Armstrong, J. M., Klein, M. H., & Goldsmith, H. H. (2005). Relational and overt aggression in middle childhood: Early child and family risk factors. *Early Education & Development*, 16, 233–257.
- Patterson, G. R. (1982). *Coercive family process*. Eugene, OR: Castalia.
- Patterson, G. R., Reid, J. R., & Dishon, T. J. (1992). *A social learning approach: Antisocial boys*. Eugene, OR: Castalia.
- Pettit, G. S., Bates, J. E., & Dodge, K. A. (1997). Supportive parenting, ecological context, and children's adjustment: A seven-year longitudinal study. *Child Development*, 68, 908–923.
- Prinstein, M. J., Boergers, J., & Spirito, A. (2001). Adolescents' and their friends' health-risk behaviour: Factors that alter or add to peer influence. *Journal of Pediatric Psychology*, 26, 287–298.

- Prior, M., Smart, D., Sanson, A., & Oberklaid, F. (2000). Does shy inhibited temperament in childhood lead to anxiety problems in adolescence? *Journal of the American Academy of Child & Adolescent Psychiatry*, 39, 461–468.
- Pulkkinen, L., & Pitkänen, T. (1994). A prospective study on the precursors to problem drinking in young adulthood. *Journal of Studies on Alcohol*, 55, 578–87.
- Rapee, R. M. (1997). Potential role of childrearing practices in the development of anxiety and depression. *Clinical Psychology Review*, 17, 47–67.
- Rasmussen, P., & Gillberg, C. (2000). Natural outcome of ADHD with developmental coordination disorder at age 22 years: A controlled, longitudinal, community-based study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39, 1424–1431.
- Reinherz, H. Z., Giaconia, R. M., Pakiz, B., Silverman, A. B., Farst, A. K., & Lefkowitz, E. S. (1993). Psychosocial risk for major depression in late adolescence. *Journal of American Academy of Child & Adolescent Psychiatry*, 32, 1155–1163.
- Renken, B., Egeland, B., Marvinney, D., Mangelsdorf, S., & Sroufe, L. A. (1989). Early childhood antecedents of aggression and passive-withdrawal in early elementary school. *Journal of Personality*, 57, 257-281.
- Renken, B., Egeland, B., Marvinney, D., Mangelsdorf, S., & Sroufe, L. A. (1989). Early childhood antecedents of aggression and passive withdrawal in early elementary school. *Journal of Personality*, 5, 257–281.
- Richman, E. A. (1985). Disorders of preschool children. In M. Rutter & L. Hersov (Eds.), *Child and adolescent psychiatry: Modern approaches*. Boston, MA: Blackwell.
- Risi, S., Gerhardstein, R., & Kistner, J. (2003). Children's classroom peer

relationships and subsequent educational outcomes. *Journal of Clinical Child & Adolescent Psychology*, 32, 351-361.

Roelofs, J., Meesters, C., ter Huurne, M., Bamelis, L., & Muris, P. (2006). On the links between attachment style, parental rearing behaviours, and internalizing and externalizing problems in non-clinical children. *Journal of Child & Family Studies*, 15, 331-344.

Roeser, R. W., van der Wolf, K., & Strobel, K. R. (2001). On the relation between social-emotional and school functioning during early adolescence: Preliminary findings from Dutch and American samples. *Journal of School Psychology*, 39, 111-139.

Roisman, G. I., & Fraley, R. C. (2008). A behaviour-genetic study of parenting quality, infant attachment security, and their covariation in a nationally representative sample. *Developmental Psychology*, 44, 831-839.

Rothbart, M. K., Derryberry, D., Hershey, K. (2000). Stability of temperament in childhood: Laboratory infant assessment to parent report at seven years. In V. J. Molfese, & D. L. Molfese (Eds.), *Temperament and personality development across the life span* (pp. 85-119). Hillsdale, NJ: Erlbaum.

Rubin, K. H., Burgess, K. B., Dwyer, K. M., & Hastings, P. D. (2003). Predicting preschoolers' externalizing behaviour from toddler temperament, conflict, and maternal negativity. *Developmental Psychology*, 39, 164-176.

Sameroff, A. J., & Chandler, M. J. (1975). Reproductive risk and the continuum of caretaking casualty. In F. D. Horowitz, M. Hetherington, S. Scarr-Salapatek, & G. Siegal (Eds.), *Review of child development research*, Vol. 4) (pp. 187-244). Chicago: University of Chicago.

Sanson, A., Hemphill, A. A., & Smart, D. (2004). Connections between temperament and social development: A review. *Social Development*, 13, 142-170.

- Sansone, R. A., Wiederman, M., & Sansone, L. (2001). Adult somatic preoccupation and its relationship to childhood trauma. *Violence Victims Journal*, 16, 39–47.
- Sartor, C. E., Lynskey, M. T., Heath, A. C., Jacob, T., & True, W. (2006). The role of childhood risk factors in initiation of alcohol use and progression to alcohol dependence. *Addiction*, 102, 216–25.
- Satterfield, J. H., & Schell, A. (1997). A prospective study of hyperactive boys with conduct problems and normal boys: Adolescent and adult criminality. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36, 1726–1735.
- Satterfield, J. H., Hoppe, C. M., & Schell, A. M. (1982). A prospective study of delinquency in 110 adolescent boys with attention deficit disorder and 88 normal adolescent boys. *American Journal of Psychiatry*, 139, 795–798.
- Saudino, K. J., Carter, A. S., Purper-Ouakil, D., & Gorwood, P. (2008). The etiology of behavioural problems and competencies in very young twins. *Journal of Abnormal Psychology*, 117, 48–62.
- Schwartz, C. E., Snidman, N., & Kagan, J. (1996). Early childhood temperament as a determinant of externalizing behaviour in adolescence. *Development & Psychopathology*, 8, 527–537.
- Schwartz, C. E., Snidman, N., & Kagan, J. (1999). Adolescent social anxiety as an outcome of inhibited temperament in childhood. *Journal of American Academy of Child & Adolescent Psychiatry*, 38, 1008–1015.
- Schwartz, D., Gorman, A. H., Nakamoto, J., & McKay, T. (2006). Popularity, social acceptance, and aggression in adolescent peer groups: Links with academic performance and school attendance. *Developmental Psychology*, 42, 1116–1127.
- Scott, J. (1998). Seeing like a state: How certain schemes improve the human condition have failed. New Heaven: Yale University.

- Senior, L. (2002). Attachment theory. In D. Hook, J. Watts, & K. Cockcroft (Eds.), *Developmental Psychology* (pp. 247-264). Cape Town: UCT.
- Shaw, D. S., Keenan, K., Vondra, J. I., Delliquadri, E., & Giovannelli, J. (1997). Antecedents of preschool children's internalizing problems: A longitudinal study of low-income families. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36, 1760–1767.
- Shaw, D. S., Owens, E. B., Giovannelli, J., & Winslow, E. B. (2001). Infant and toddler pathways leading to early externalizing disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40, 36–43.
- Siebenbruner, J., Englund, M. M., Egeland, B., & Hudson, K. (2006). Developmental antecedents of late adolescent substance use patterns. *Developmental Psychopathology*, 18, 551–71.
- Simons, K. J., Paternite, C. E., & Shore, C. (2001). Quality of parent/adolescent attachment and aggression in young adolescents. *Journal of Early adolescence*, 21, 182-203.
- Simons, R. L., Chao, W., Conger, R. D., & Elder, G. H. (2001). Quality of parenting as mediator of the effect of childhood defiance on adolescent friendship choices and delinquency: A growth curve analysis. *Journal of Marriage & the Family*, 63, 63–79.
- Sinclair, D.A., & Murray, L. (1998). Effects of postnatal depression on children's adjustment in school. *British Journal of Psychiatry*, 172, 58–63.
- Siqueland, L., Kendall, P. C., & Steinberg, L. (1996). Anxiety in children: Perceived family environments and family interaction. *Journal of Clinical Child Psychology*, 25, 225–237.
- Smith, C. A. (1994). Dis-attachment. *Australian & New Zealand Journal of*

Psychiatry, 28(4), 691-693.

Smith, C. L., Calkins, S. D., Keane, S. P., Anastopoulos, A. D., & Shelton, T. L. (2004). Predicting stability and change in toddler behaviour problems: Contributions of maternal behaviour and child gender. *Developmental Psychology*, 40, 29–42.

Solomon, J., & George, C. (1999). The measurement of attachment security in infancy and childhood. In Cassidy & P.R. Shaver (Eds.), *Handbook of attachment: Theory, research and applications* (pp. 287-318). New York, NY: Guilford.

Spangler, G., & Grossmann, K.E. (1993). Biobehavioural organization in securely and insecurely attached infants. *Child Development*, 64, 1439-1450.

Spence, S. H., Najman, J. M., Bor, W., O'Callaghan, M., & Williams, G. M. (2002). Maternal anxiety and depression, poverty and marital relationship factors during early childhood as predictors of anxiety and depressive symptoms in adolescence. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 43, 457– 470.

Sroufe, L. A. (1983). Infant-caregiver attachment and patterns of adaptation in preschool: The roots of maladaptation and competence. In M. Perlmutter (Ed.), *Minnesota symposia on child psychology* (Vol. 16, pp. 41-81). Hillsdale, NJ: Erlbaum.

Stipek, D., & Miles, S. (2008). Effects of aggression on achievement: Does conflict with the teacher make it worse? *Child Development*, 79, 1721–1735.

Teti, D. M., & Ablard, K. E. (1989). Security of attachment and infant-sibling relationships: A laboratory study. *Child Development*, 60, 1519-1528.

Toth, S. L., & Cicchetti, D. (1996). Patterns of relatedness, depressive symptomology, and perceived competence in maltreated children. *Journal*

- Tremblay, R. E., Pihl, R. O., Vitaro, F., & Dobkin, P. L. (1994). Predicting early onset of male antisocial behaviour from preschool behaviour. *Archives of General Psychiatry*, 51, 732–739.
- Troy, M., & Sroufe, L. A. (1987). Victimization of pre-schoolers: Role of attachment relationship history. *Journal of the American Academy of Child & Adolescent Psychiatry*, 26, 166–172.
- Twenge, J. M., & Nolen-Hoeksema, S. (2002). Age, gender, race, socioeconomic status, and birth cohort difference on the children's depression inventory: A meta-analysis. *Journal of Abnormal Psychology*, 111, 578–588.
- Urberg, K.A., Degirmencioglu, S.M., & Pilgrim, C. (1997). Close friend and group influence on adolescent cigarette smoking and alcohol use. *Developmental Psychology*, 33, 834–844.
- Verscheren, K., Dossche, D., Marcoen, A., Mahieu, S., & Bakermans-Kranenburg, M. (2006). Attachment representations and discipline in mothers of young school children: an observation study. *Social Development*, 15, 659-675.
- Walden, B., McGue, M., Iacono, W. G., Burt, S. A., & Elkins, I. (2004). Identifying shared environmental contributors to early substance use: The respective roles of peers and parents. *Journal of Abnormal Psychology*, 113, 440–50.
- Warren, S. L., Huston, L., Egeland, B., & Sroufe, L. A. (1997). Child and adolescent anxiety disorders and early attachment. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36, 637–644.
- Wasserman, G. A., Miller, L. S., Pinner, E., & Jaramillo, B. (1996). Parenting predictors of early conduct problems in urban, high-risk boys. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35, 1227–1236.

- Wenar, C., & Kerig, P. (2000). *Developmental psychopathology: From infancy through adolescence (4th Ed)*. Boston, MA: McGraw-Hill.
- Wilkins, A. J., O'Callaghan, M. J., Najman, J. M., Bor, W., Williams, G. M., & Shuttlewood, G. (2004). Early childhood factors influencing health-related quality of life in adolescents at 13 years. *Journal of Paediatrics & Child Health*, 40, 102–109.
- Windle, M. (1993). A retrospective measure of childhood behaviour problems and its use in predicting adolescent problem behaviours. *Journal Studies of Alcohol*, 54, 422–31.
- Windle, M., & Windle, RC. (2003). Alcohol and other substance use and abuse. In: Adams, G. R., Berzonsky, M. D., (Eds.). *Blackwell handbook of adolescence* (pp. 450-469). Malden, MA: Blackwell.
- Woolston, J. L., & Rudolph, K. D. (2003). Childhood comorbidity of anxiety/affective disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 28, 703-713.
- Zucker, R. A. (2006). Alcohol use and the alcohol use disorders: a developmental–biopsychosocial systems formulation covering the life course. In D. Cicchetti, & D. J. Cohen (Eds.) *Risk, Disorder, & Adaptation* (pp. 620-656). Hoboken, NJ: Wiley.

Appendix

A. Information letter

PROJECT TITLE: Attachment and its association to externalizing and internalizing behaviours amongst school aged children at Mankweng.

PROJECT LEADER: N.P. Ramoloto (200626609)

INFORMATION FOR PARTIPANTS

1. You are invited to participate in the following research survey:

Attachment and its association to externalizing and internalizing behaviours amongst school aged children at Mankweng

2. Participation in the project is completely voluntary and you are free to withdraw from the survey (without providing any reasons) at any time.

3. It is possible that you might not personally experience any advantages by participating, although the knowledge that may be accumulated through the study might prove advantageous to others.

4. You are encouraged to ask any questions that you might have in connection with the survey at any stage. The project leader and her research assistants will gladly answer them. With respect to the study itself, they will also discuss the study in detail with you. However, this can only be done after you have completed your responses. This way your participation will not be influenced by the utterances and explanations they will give to you.

5. Your involvement in the project

The researcher does not anticipate that any deep personal discomfort will arise from your participation in this survey. However, if, for whatever reason, you experience any conflicts or confusion arising from the nature of the questions, these may be due to not having come across such statements before. The researcher or a designated person will comfortably put you at ease since the statements are common in these types of surveys.

A. Lengwalo la ditsibišo

Leina la Projeke: *Attachment* le kamano ya yona go maitshwaro ao a ka bonwago le ao a le go ka teng magareng ga bana ba mengwaga ya sekolo mo Mankweng.

Moetapele wa Projeke: N.P. Ramoloto (200626609)

TSEBIŠO GO BATŠEAKAROLO

1. O mengwa go tšea karolo mo nyakišišong yeo e latelago:

Attachment le kamano ya yona go maitshwaro ao a ka bonwago le ao a le go ka teng magareng ga bana ba mengwaga ya sekolo mo Mankweng.

2. Go tšea karolo mo projekeng ye ke maikemišetšo, ebile batšeakarolo ba dumeletšwe go tlogela projeke (ka nako efe goba efe) ka ntle le dipotšišo.

3. Go ka kgonagala gore o se bune selo mo projeke bjalo ka motho efeela, go tšeakarolo ga gago mo projekeng ye go ka tswela batho babangwe mohola.

4. Bjale ka motšeakarolo o hlohleletšwa go botšiša potšišo ye nngwe le ye nngwe yeo o nago le yona mabapi le projeke nako efe goba efe. Moetapele wa projeke gammogo le bathuši bagagwe ba tla thabela go fetola dipotšišo. Mabapi le projeke, Moetapele le bathuši bagagwe ba tla hlaloša ka botlalo dinhla ka moka. Legegolebjalo, ba tla hlaloša morago ga ge batšeakarolo ba fetotše letlakalapotšišo. Ka tsela ye, dikarabo tša motšeakarolo di ka se hlohleletšwe ke diphetolo tša banyakišiši.

5. **Gotšeakarolo ga gago mo projekeng**

Monyakišiši ga a na maikemišetšo a go kgwatha goba go šišinya maikutlo a batšeakarolo mo projekeng. Lega gole bjalo, ge go ka diragala gore maikutlo a motšeakarolo a šišinyege goba gona go kukega ka lebaka la dipotšišo tšeo dilego mo godimo ga letlakalapotšišo e kaba ele ka baka la gore motšeakarolo a sa fele a kopana le mantšu goba dipolelo tše bjalo. Monyakišiši goba motho yoo

a swanetšego o tla go thuša go bea maikutlo goba matswalo fase bjale
ka ge dipotšišo tše bjalo di tlwaelegile mo dinyakišišong tše bjalo.

B. Consent form

**CONSENT FORM TO BE SIGNED BY THE PARTICIPANT
(LEARNER)**

CONCENT FORM

I _____ hereby agree to participate in this research project which focuses on **Attachment and its association to externalizing and internalizing behaviours amongst school aged children at Mankweng.**

The purpose, terms and conditions of the study have been thoroughly explained to me and I thus understand my rights and freedom in participating in this study. I also understand my freedom and the right I have to terminate the continuation of this study should I feel like discontinuing with my participation at any time.

I understand that the outcomes of this study may not benefit me personally, and I also understand that my identifying details provided on the form(s) will not, in any way be linked to the results of this study. I understand that my name and my answers in this study will remain confidential.

Learner's name

Signature

Date _____ place of agreement _____

**FOROMO YA TUMELELANO YEO E SAENAGO KE
MOTŠEAKAROLO (MOITHUTI)**

FOROMO YA TUMELELANO

Nna _____ ke dumela go tšea karolo mo nyakišišong yeo o nyakišišago ka **Attachment le kamano ya yona go maitshwaro ao a ka bonwago le ao a le go ka teng magareng ga bana ba mengwaga ya sekolo mo Mankweng.**

Maikemišetšo le mabaka ao a beilwego ka nyakišišo ye a hlalošitšwe ka botlalo gomme kea a kwešiša. Gape ke kwešiša le ditokelo le bolokologi bja ka mo botšeakarolong bja nyakišišo ye. Ke kwešiša gape le bolokologi le tokelo ya ka ya go emiša ka tšwelopele nyakišišong ye ge ke nyaka go emiša ka go tšea karolo nako efe kapa efe.

Ke a kwešiša gore dipelo tša nyakišišo ye di ka no se nkhole ka bonna, ke kwešiša gape le gore tshedimošo ya ka ya boitsebišo yeo e filwego foromong ye e ka se amantšhwe le dipelo tša nyakišišo ye. Ke a kwešiša gore leina la ka le dikarabo tša ka di tla swarwa bjalo ka sephiri.

Leina la moithuti

Mosaeno

Letšatši-kgwedi le ngwaga _____ Lefelo la tumelano _____

CONSENT FORM TO BE SIGNED BY LEARNER'S PARENT/GURDIAN

CONCENT FORM

I _____ hereby volunteers to participate together with my child _____ in the following research survey: **Attachment and its association to externalizing and internalizing behaviours amongst school aged children at Mankweng.**

I realize that participation in the project is completely voluntary and I am free to withdraw from the survey (without providing any reasons) at any time. I was notified that I and my child too may not personally experience any advantages by participating, although the knowledge that may be accumulated through the study might prove advantageous to others.

I also understand that my identifying details and those of my child provided on the form(s) will not, in any way be linked to the results of this study. I understand that my name and my answers in this study will remain confidential and the same applies to my child.

Parent/Guardian's name

Signature

Date _____

**FOROMO YA TUMELELANO YEO E SAENAGO KE
MOTSWADI/MOHLOKOMEDI WA MOITHUTI**

FOROMO YA TUMELELANO

Nna _____ ke ithaopa go tšeakarolo go
tee le ngwana wa ka _____ mo nyakišišong
ye e latelago: **Attachment le kamano ya yona go maitshwaro ao a
ka bonwago le ao a le go ka teng magareng ga bana ba mengwaga
ya sekolo mo Mankweng.**

Ke a lemoga gore go tšea karolo mo projekeng ye ke maikemišetšo,
ebile batšeakarolo ba dumeletšwe go tlogela projeke (ka nako efe goba
efe) ka ntle le dipotšišo. Ke tsebišitšwe ka kgonagalo ya gore ke se
bune selo mo projeke bjalo ka motho efeela go tee le ngwana wa ka,
lega go le bjalo go tšeakarolo ga ka mo projekeng ye go ka tswela
batho babangwe mohola.

Ke kwešiša gape le gore tshedimošo ya ka le ya ngwana w aka ya
boitsebišo yeo e filwego foromong ye e ka se amantšhwe le dipelo tša
nyakišišo ye. Ke a kwešiša gore leina la ka le la ngwana wa ka le
dikarabo tša rena di tla swarwa bjalo ka sephiri.

Leina la motswadi/mohlokomedi

Mosaeno

Letšatši-kgwedi le ngwaga _____