

ATTACHMENT AND IDENTITY DEVELOPMENT

AMONGST

EARLY AND MIDDLE ADOLESCENTS

By

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DECLARATION

I declare that the (mini/dissertation/dissertation/thesis) hereby submitted to the University of Limpopo, for the degree of (degree & field of research) 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.

Initials & Surname (Title)

Date:

DEDICATION

This project is dedicated to my loving family:

Sentshuhlang Jacob Mothapo (Dad), Kobela Gate Mothapo (Mom), Mathaba Caroline Mothapo (Sister), Mapula Tryphosa Mothapo (Sister), Lesiba Johannes Mothapo (Brother), and Simon Katleho Mpho Monama (Husband).

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ABSTARCT

There is a considerable literature linking aspects of personality, attachment, and identity development. Five hundred and thirty one boarding school learners participated in a study of the relationship between identity, assessed with the Ochse' Erikson scale (Ochse, 1983; Ochse & Plug, 1986), EPIES (Rosenthal et al., 1981), PIES (Markstrom et al., 1997), and Tan's Eriksonian Ego Identity (Tan et al., 1977); domicile (rural or urban), and attachment assessed with The Inventory of Parent and Peer Attachment Revised (IPPA-R; Gullone, & Robinson, 2005). No relationship was found between domicile, and the development of attachment and identity. Results of the current study revealed no significant relationship between attachment, identity development and home background of individuals.

Keyword: Attachment; Identity formation; Internal working models; Exploration; Commitment.

CHAPTER 1

1. INTRODUCTION

1.1 INTRODUCTION

Attachment is defined as a close, enduring affectional bond or relationship between two persons (Ainsworth, 1989). These bonds are assumed to promote human development throughout the life span by providing recipients with emotional support and a sense of closeness and continuity. The theory of attachment further recognizes the existence of an internal working model, which model carries an internalized set of beliefs that integrate perceptions of one's own competence. The model helps develop an individual's sense of independence to face up and interpret new situations with confidence.

Bowlby (1969) and Ainsworth (1989) recognized that attachment bonds exert a powerful and enduring influence on human behaviour. Bowlby (1973, 1977) and Ainsworth (1989) proposed that attachment is an enduring, unique emotional bond, as it enables the adolescent to move away from the family and explore the world with confidence. In an attachment life-span perspective, needs and capacities for relatedness are seen as normative processes at all ages. In the development of good attachment styles, the development of working models, together with family structure or bonds, results in confidence in adolescents to explore different alternatives in life.

Attachment styles have been proposed as an individual differences theory, related to the strategies developed in order to form close affectional bonds (Bowlby, 1969, 1973, 1979). Furthermore, attachment theory assumes continuity between early parent-child relationships and interpersonal competence later on in life, mediated by internal working models of self and others; these internal models are assumed to intervene in the interpretation of and reaction to new situations.

Crittenden (1995) has recently re-conceptualized attachment patterns as cognitive and affective patterns of mentally processing information to create models of interpersonal reality. However, individuals with different styles of relating may not only differ in their organizing of incoming information, but they may also have differential effects on their social environment, evoking different attitudes and expectations in others. Attachment issues become salient when children enter adolescence, with its increasing involvement with peers and re-evaluation of the attachment to parental figures (Priel, Mitrany & Shahar, 1998). Adolescence, as observed in Western societies, is also a time when identity is consolidated. An intact identity will develop if attachment is healthy and well developed.

In the context of a boarding school, peer support in times of distress may constitute the main factor affecting this process. From an attachment-ethological perspective, relationships with age mates, the 'social system' (Ainsworth, 1991), is observed to fulfil important developmental and survival functions. The application of the concept of attachment within the African context, especially among early and middle adolescents, is uncommon, and as a result, there is dearth of studies that measured this variable in this population.

1.2 Statement of the Problem

Attachment and identity studies have a long history among Western researchers. Although research on attachment and identity is usually conducted independent of one another, this does not reflect the common origins of the theories. The theories originate from the tradition of psychoanalysis, and share some similarities from that point of view. It is natural to study the two concepts together.

This study investigates the relationship between attachment and identity development in the African context. So, it is not clear what kind of relationship will be found between attachment and identity development among early and late adolescents in the African context.

1.3 Background to and motivation for the study

1.3.1 Aim of the study

The primary aim of the study is to determine whether there is a relationship between attachment and identity development among African early- and mid-adolescent high school learners. The study also investigates whether there is an association between domicile (i.e., rural or urban) and attachment and identity development.

1.4 Need for the study

Attachment styles are important to understand since their presence has an effect on the process and outcome of an individual's exploratory interests. Attachment styles are receiving sufficient attention in Western societies; it is surprising that the researcher could not find any South African study relating attachment styles and identity development. Therefore, it is necessary to conduct a study of this nature, since the variables concerned have been found to be critical for adjustment and development in the West. It is not clear whether the same will hold in African societies.

1.5 Area of the study

The study was conducted among learners at Makgoka and Marobathota High Schools, situated at Boyne area, and Motse-Maria High School and Pax College at Ga-Matlala.

1.6 Objectives of the study

- 1.6.1** To investigate the relationship between domicile (rural or urban) and attachment.
- 1.6.2** To investigate the relationship between domicile (rural or urban) and identity.
- 1.6.3** To determine if attachment styles can predict identity development.

1.7 Hypothetical statements

Based on the literature, the following hypotheses were drawn:

- 1.7.1** A rural home background will be associated with insecure and anxious attachment styles.
- 1.7.2** A rural home-background will be related to lower levels of identity development (identity diffusion), and an urban home-background will be associated with higher identity development.
- 1.7.3** Healthy attachment styles are expected to predict the development of higher levels of identity among the learners.

1.8 Definition of concepts

Attachment: According to Ainsworth and Bowlby's propositions (Ainsworth, 1989; Bowlby, 1973, 1977) attachment is an enduring unique emotional bond that enables the infant and later, adolescent, to move away from the primary care-giver (Ainsworth, 1989; Bowlby, 1977) and explore the world with confidence.

Internal working models: According to Bowlby (1977), internal working models are patterns of relating acquired in the early parent-child relationship and are internalized. The working models serve as a basis for how an individual will enter and subsequently maintain other close relations.

Bowlby further theorised that internal working models are processes by which each person becomes the individual that he or she is. In a way, the internal working models are crucial in delineating an individual's personality style.

Identity formation: According to Erickson (1968), identity formation is the process where the adolescent struggles to answer the question 'Who am I'. These struggles result in an integrated sense of individuality, wholeness and continuity.

Exploration: Exploration is one of two basic dimensions used by Marcia (1980) to operationalize identity. Exploration is the process by which the individual actively searches for a resolution to the issues of choosing the goals, roles, and beliefs about the world that provides the individual's life with direction and purpose.

Commitment: According to Marcia (1966), commitment represents the actual resolution of identity issues such as the selection of occupation, relationship, group membership, and religion.

CHAPTER 2

2. LITERATURE REVIEW

2.1 Introduction

The interest in the relationship between attachment and identity formation has been studied for some time. However, studies were hampered by the lack of a comprehensive measure of identity, and one of the goals of psychology has been to establish a model that can conveniently describe human identity development (LaVoie, 1994). The focus will be on the developmental processes of both identity and attachment, measurement of identity theory, prevalence of identity and attachment amongst different cultures and the integration of both attachment and identity developmental concepts.

2.2 Description of identity and attachment development

Erikson's (1977, 1968) concept of identity is so multifaceted that it cannot be concisely defined. It embraces a complex of social and self-representations, including personal, public, individual and group identities. According to Erikson, the development of identity proceeds through eight life stages, each of which represents a period of heightened potential and increased vulnerability of a particular component of the personality. Near the end of each stage there is a turning point, which Erikson, 1964, 1968 calls a crisis. This is brought about by conflict between maturational changes in the individual and new demands that society makes because of these changes. The positive resolution of each crisis depends on what Erikson calls mutuality between the individual and society. Erikson (1977, 1968), in his theory of psychosocial development, considers the process of identity formation to be the major developmental task with which adolescents have to deal.

The crises that normally precede periods of commitment to personal and social roles are seen as developmental groundwork for the synthesis and integration processes that are to follow. Although Erikson himself did not elaborate extensively on the role that the family plays in the initiation of exploratory movements in adolescence, the epigenetic principle of his model assumes that the resolution of the present dilemmas is dependent on proper resolution of earlier stages of psychosocial development.

The past opportunities for development, and specifically the child's sense of inner security, which is based on an optimal balance between basic trust and mistrust, provide important foundations for identity formation. For this adaptive balance to occur, according to Erikson, the emotional adjustment between the caretaker's behaviours and the child's needs is important. Furthermore, trust, as a developmental competence, is being tested and reconstructed, if need be, in the context of intimate relationships with parents and peers during this stage of identity formation, thus concurrently influencing the resolution of identity formation. Finally, explicit in Erikson's theory are the roles that cultural and historical factors play in the organization of personal experience and in one's sense of continuity and coherence.

Exploratory interest is also implicated in Erikson's lifespan model of development, particularly during the adolescent phase of identity formation (Erikson, 1968). Erikson believed that adolescents who have successfully resolved childhood issues of trust, autonomy, initiative, and industry are well prepared to take on young adult challenges of crafting a personal identity.

Although the theories of attachment and identity have been developed separately, several authors have tried to explore empirically the connections between the constructs derived from the theories. Attachment theory and identity theory both offer interesting insights that would contribute to our understanding of adolescents' exploratory interests.

Attachment theory (Bowlby, 1988) argues that psychologically separating from childhood attachment figures would be particularly distressing without mental representation of a soothing and reassuring other on which to rely.

Securely attached individuals are more open to the intellectual and environmental exploration that underlies the identity formation (Erikson, 1968; Marcia, 1980). Identity theory suggests that individuals possessing a high degree of trust, autonomy, initiative, and industry have more adequate psychological resources to withstand the threats to self that often accompany exploration (Lapsley, Rice, & FitzGerald, 1990; Schultheiss, & Blustein, 1994). Campbell, Adams and Dobson (1984), for example, suggest that a combination of emotional attachment to parents and the encouragement of independence are associated with identity achievement and moratorium. Adolescents who were classified as foreclosed reported the highest levels of affection toward their parents, and those classified as diffused reported the lowest. Both groups of subjects, however, reported low levels of independence.

According to Erikson (1977, 1968), the most critical stage in identity formation is adolescence. It is preceded by the stages of trust versus mistrust, autonomy versus shame and doubt, initiative versus guilt and industry versus inferiority. Furthermore, Erikson argues that during earlier stages, a child's identity is largely determined by identification with role models. Successful development also depends on acquiring (through social interaction) a sense of trust, autonomy, pleasure from achievement, and ability to work with others. Erikson (1968, 1977) explains the formation of identity in adolescence depends on re-integration of personality – in order to accommodate both previous identifications and current changes in oneself.

One of the best known and mostly used elaborations of Erikson's view on identity formation is Marcia's (1966) identity status model. Marcia describes four clearly differentiated identity statuses based on the amount of exploration and commitment that the adolescent is experiencing or has experienced.

The presence or absence of self-exploration (originally referred to as crisis) and communication serves as the criteria for distinguishing for identity type or status. Identity diffusion (D) indicates that the adolescent has made no commitment as yet regarding a specific developmental task and may or may not have explored different developmental alternatives in that domain.

Foreclosure (F) means that the adolescent has made a commitment without exploration. In Moratorium (M) the adolescent is in a state of active exploration and has made no commitment or at best an unclear one. Identity achievement (A) signifies that the adolescent has finished a period of active exploration or made a commitment. According to Marcia (1966), theoretically as adolescents become older they typically progress from identity diffusion to identity foreclosure to identity moratorium and finally to identity achievement based on changes in the levels of exploration and commitment in identity-related areas.

Identity development was described by Erikson (1950) as a process through which the challenges and demands of society require the young person to make choices and decisions which will lead to irreversible role patterns, commitments for adult life and, subsequently, related self-definitions. Marcia (1980) developed an identity status paradigm according to which identity formation can be described in terms of the crises young people go through and the commitments they make concerning their vocational direction, ideological stance and sexual orientation. On the basis of these two processes, identity was characterized in terms of four statuses, i.e., identity diffusion, moratorium, foreclosure and achievement.

Several studies have failed to find a relationship between attachment and identity and thus have not shown that differences in attachment can be used to predict differences in identity development (Frank, Pirch, & Wright, 1990; Kroger, & Haslett, 1988; Quintana, & Lapsley, 1987).

Lapsley, Rice and FitzGerald (1990) on the other hand, found that personal and social identity was significantly predicted by attachment to parents in two separate college samples. Kamptner (1988) also found that family security was related to identity development and identified both a direct and an indirect influence that operated through the enhancement of the adolescent's social confidence and affiliation. Furthermore, Benson, Cosby and Harris (1992) found an association between identity and attachment and also showed that identity achievement, independent of adolescent gender, was related to the adolescents' attachment to their mothers but not to their fathers.

There are suggestions that the relationship between attachment and identity development can be fruitfully studied with different yet equivalent concepts. Several authors have argued that a single construct, separation versus individuation, which combines family connectedness and family encouragement of individuality, can be used to predict identity (Campbell et al., 1984; Grotevant, & Cooper, 1985; Matos, De Almeida, Barbosa, & Costa, 1999; Quintana, 1987).

Quintana and Lapsley (1990), using a structural equation modelling approach, found that this latent construct had a direct relationship with ego identity and that attachment variables alone did not explain the differences in identity status. However, another study (Schultheiss, & Blustein, 1994) did not confirm those results. The conjoint influence of the psychological separation and parental attachment variables did not account for the most significant amount of the variance in their analysis.

More recently, Bosma (1985) and Grotevant (1987) have suggested that it might be more fruitful to describe adolescent identity development in terms of the processes it includes, especially the exploration of alternatives and the commitment to choices in different domains of life, rather than in terms of the four statuses. The identity formation process shares certain basic tenets with traditional attachment theory.

In general, the two paradigms both indicate that security, exploration, and development are influenced by relationships with parents and that behaviour is guided by constructions of perceptions of self and the environment (Benson et al., 1992).

Benson et al. (1992) further explains that attachment theory highlights the importance of the secure base provided by the caregiver as facilitating exploration (Ainsworth, 1989) and identity theorists hypothesize that security is also necessary for establishing an identity (Marcia, 1980). Benson et al. (1992) also indicated that according to Bowlby (1980), secure attachment leads to mental health, and the idea that identity is assisted by security (Marcia, 1980, 1966) suggests that secure attachments should facilitate identity development and prevent identity diffusion.

Marcia developed the identity status paradigm in an effort to operationally define and empirically investigate Erikson's construct of identity. In interview studies, Marcia found that the participants had different ways of arriving at an identity, and that they displayed diverse outcomes of identity formation (Marcia, 1994, 1993). The difference found could be explained with reference to important processes involved in the formation of an identity, namely, *exploration* and *commitment*.

Much information about significant behavioural, cognitive, affective, and attitudinal traits associated with the different identity statuses have been gathered over years, and identity-achieved individuals have gone through a period of exploration and have made identity-defining commitments that they are also assumed to have successfully resolved the psychosocial task of adolescence (Marcia, 1993). One key assumption in identity theories is that identity progress during adolescence is a function of age. This development has been suggested to be due to various factors, such as changes in individual needs, maturational processes and age-related societal demands (Erikson, 1959; Marcia, 1980).

The majority of studies in this area of research have also shown that there is a change towards more mature identity statuses during adolescence, suggesting that they (identity statuses) are age related (Bosma, 1985; Kroger, & Haslett, 1988; Meilman, 1979; Streitmatter, 1993; Waterman, 1985). However, a few studies have failed to demonstrate any such age-related changes (Adams, & Jones, 1983; Grotevant, Thornbecke, & Meyer, 1982).

Adolescents' developmental environments consist of a variety of contexts such as peer groups, family, and culture. The society in which they live may also play an important role in identity development. For example, Grotevant (1987) suggested that societies affect the process of identity formation by shaping their members' expectations of and beliefs about the options available, and by regulating access to alternatives. The region where adolescents live, that is, in urban or rural environments, is a societal factor that may have an important impact on their identity development. It might be expected, for example, that these environments differ in the educational opportunities and career prospects they provide.

Adolescents in rural areas may well be socialized into more traditional types of values and roles than those in urban the environments. These differences might be expected to be reflected in identity development. For example, it may be that an age-related increase in identity exploration and in commitments related to education and occupations takes place only in urban environments where there is a wide variety of educational options and good career prospects. On the other hand, traditional values typical of rural environments might be expected to be reflected in the importance of family related topics in identity work.

Besides being affected by various sociocultural environments, identity development may also progress differently among boys and girls. It has been suggested, for example, that interpersonal issues are more closely associated with girls' identity formation than with that of boys (Bilsker, Marcia, & Scheidel, 1988; Marcia, 1980), although the findings are contradictory (Archer, 1989; Patterson, Nygaard, Steinberg, & Turkey, 1992; Streitmatter, 1993). However, it is also possible that there is variation in sex roles across societies and urban and rural areas, and this may influence some of the gender differences in identity exploration and commitment (Nurmi, 1991).

The attachment system is proposed to have evolved as a set of organized behaviours, separate from and antithetical to those of feeding, sexual, and exploratory behaviour (Aspelmeier, & Kerns, 2003). Working models have been the dominant explanatory mechanism linking attachment in infancy to attachment at later ages, including adulthood. Although the formation of attachment is a normative event, there are individual differences in parent-child attachment that reflect variations in the degree to which a caregiver functions as a secure base (Ainsworth, Blechvar, Waters, & Wall, 1978; Sroufe, & Waters, 1977).

Bowlby's observations of individual differences in attachment were empirically confirmed by Ainsworth et al. (1978), who identified three attachment types using the 'Strange Situation' procedure. Secure children explored the unfamiliar environment in their mothers' presence, avoidant children did not appear excited to explore the playroom, and ambivalent children demonstrated a strong preoccupation with their mother that precluded exploration of the playroom.

According to Bowlby's (1969) evolutionary ethology attachment theory, the infant is endowed with an attachment behavioural system, which ensures sufficient proximity to primary caregivers to promote the infant's survival. Essentially, attachment theory describes a fundamental normative process in early development defined in terms of behavioural and affective regulation.

The attachment relationship (Bowlby, 1969) and involves an effective bond between infant and caregiver that may be characterized in terms of regulation of infant emotion.

A number of studies have found that individuals who are securely attached to their parents tend to have higher levels of identity development (e.g., Benson, Harris, & Rogers, 1992; Kroger, 1985; Kroger, & Haslett, 1988; Lapsley, Rice, & Fitzgerald, 1990; Zimmermann, & Becker-Stoll, 2002). In a study of 91 college students, Van IJzendoorn and Kroonenberg (1988) hypothesized that securely attached participants were more likely to be identity achieved. However, only 5 participants scored as identity achieved. All of them did report having a secure attachment style.

Hoegh and Bourgeois (2002) studied 79 undergraduates and did find that identity achieved individuals showed higher levels of secure attachment and diffused individuals showed higher levels of fearful attachment. Individuals in moratorium also scored highest in secure attachment. Foreclosed individuals tended to have higher scores on either secure or dismissive attachment styles. Specifically, while these two attachment styles differ in relationship avoidance, what they share in common is a lack of relationship anxiety, which is typical of the fearful and preoccupied attachment styles.

Kennedy (1999) surveyed 225 college freshmen and found that individuals identified as preoccupied in attachment style had higher identity diffusion and moratorium scores than did secure individuals. Fearful individuals also had higher diffusion scores than the secure individuals. Secure individuals had higher achievement scores than the fearful individuals. None of the attachment styles had significantly different foreclosure scores. The quality of attachment is categorized as A (anxiously avoidant), B (secure), or C (anxiously resistant). Some empirical findings also suggest that associations between identity and family variables depend upon gender (see Costa, 1991; also Marcia, 1993, for a review).

Cooper and Grotevant (1987), for example, found that female adolescents' expressions of separateness and individuality in the family were associated with exploration in the areas of friendship and dating, whereas males' expressions of connectedness were associated with exploration in the same areas. Similarly, Kamptner's (1988) study suggested that family variables exert a stronger influence on male identity, whereas social confidence seems to play an important role in female identity. Using a Portuguese college sample, researchers concluded that difficulties in separation individuation in the mother adolescent relationship have a stronger negative impact on future autonomy and dating for males than females (Barbosa, Costa, de Almeida, & Matos, 1999).

On the other hand, Schultheiss and Blustein (1994) found that parental attachment was more important in the identity formation process for women than it was for men and suggested that future researchers undertake separate analyses with male and female samples in order to illuminate sex differences. Other studies have failed to find gender differences in the relationship between attachment and identity (Benson et al., 1992; Kroger, 1995; Lapsley et al., 1990; Matos et al., 1999).

Van IJzendoorn and Kroonenberg (1988) have identified samples that deviate clearly from the original distributions presented by Ainsworth et al. (1978); Japanese and Israeli samples are in the direction of a higher proportion of type C (anxious resistance) patterns and North German samples are in the direction of a higher proportion of type A (anxious avoidant) patterns.

These comparative studies supported the notion that attachment development was basically the same in the two cultures. In both cultures, 1-year-olds try to stay in close proximity to the caregiver, especially in threatening situations, and in both cultures they use their caregivers as a safe haven from which to explore the environment (Van IJzendoorn, & Kroonenberg, 1990).

Although formation of attachment is a normative event, there are individual differences in parent-child attachment that reflect variations in the degree to which a caregiver functions as a secure base (Ainsworth et al., 1978, Sroufe, & Waters, 1977).

Main (1990) has discussed these individual differences in terms of the children's use of adaptive conditional strategies aimed at regulating emotions and eliciting optimal care giving from the attachment figure. Primary strategies are the context-sensitive behaviours generated by the attachment behavioural system, exemplified by the secure attachment pattern.

Steinberg and Silverberg (1986) outline two competing views of the relationship between attachment to parents and attachment to peers. The first suggests that during adolescence there is a shift away from parents toward peers as a part of a striving for autonomy. According to this view, attachment to parents and attachment to peers should be inversely related. When a shift away from parents occurs in early adolescence, feelings of self-reliance may be diminished, and may lead to the adolescent being unduly susceptible to peer-group pressure, especially in antisocial activity (Steinberg, & Silverberg, 1986).

In an attachment life-span perspective, needs and capacities for relatedness are seen as normative processes at all ages. They are closely related to the desires for self-differentiation and autonomy. In this sense, the process of developing psychological autonomy in adolescence does not imply detachment from the family. On the contrary, it occurs most easily in the context of emotional proximity to the family and the security that it provides (Grotevant, & Cooper, 1986; Matos, & Costa, 1996).

The Inventory of Parent and Peer Attachment (Armsden, & Greenberg, 1987) is a self report measure providing a separate assessment of the quality of parent and peer attachment in late adolescents and young adults.

The theoretical underpinning of this measure is based on the affective-cognitive dimensions of trust in the accessibility and responsiveness of attachment figures. The instrument comprised two scales that are scored independently.

Kamptner (1988) found that family security was related to identity development and identified both a direct and an indirect influence that operated through the enhancement of the adolescent's social confidence and affiliation. Benson et al. (1992) found an association between identity and attachment and also showed that identity achievement, independent of adolescent gender was related to the adolescent's attachment to their mothers than to their fathers. According to the attachment theory, there is a universal human need to establish close enduring emotional bonds to feel secure and explore one's self and the world with confidence (Ainsworth, 1967, 1989; Bolwby, 1973, 1982).

Although attachment theory was born in the context of infancy, soon it inspired the work of psychologists and researchers concerned with adolescence and adulthood. Empirical research on the behavioural organization of attachment in infancy (Ainsworth et al., 1978) opened the door to research on their presentational organization of attachment in adolescence and adulthood.

2.3 Measurement in Identity Theory

From the objectivist point of view that characterizes the current model of scientific inquiry, knowledge development in any field of study, beyond pure theoretical speculation, is dependent on sound and reliable measurement techniques. The ability of an empirical study to generate findings that are both theoretically and practically useful depends on the ability of the measures used to adequately tap the constructs being studied.

Survey measures, in particular, are vulnerable to multiple sources of error such as social desirability, false and invalid responding, and participant's effects, (Rosenthal & Rosnow, 1991). Because identity research is largely dependent on questionnaires and interviews, it is crucial that careful attention is paid to the potentially biasing effects that measurement technique (e.g., format, medium) can exert on the resulting data (Schwartz, Dunham, & Mullis, 1998). Even within a given medium and format, such as paper-and-pencil questionnaires, different identity measure utilize differing methods of obtaining responses (e.g., 6-point vs. 5-point Likert Scales, targeting exploration and commitment vs. targeting each status directly) and target different domains.

Although conceptual advances in identity status theory began almost immediately after Marcia (1966) first published the model, progress in measurement has lagged significantly behind. Two principal types of identity measures have been used: structured interviews and likert-scale questionnaires. Some degree of convergence has been found between the two types of measures (Balistreri, Busch-Rossnagel, & Geisinger, 1995; Adams & Bennoni, 1986; Craig-Bray & Adams, 1986), different identity instruments often yield incompatible identity status classifications in one fourth or more of the participants surveyed (Berzonsky, & Adams, 1999; Schwartz et al., 1998).

Additionally, because different identity instruments generally survey different domains, convergent validity can be ascertained only in terms of overall identity status. At present, identity measures have not been standardized in any way that would facilitate comparison across instruments (cf. Van Hoof, 1999).

2.4 Theoretical perspective

The present study uses attachment theory, and the related psychosocial theory of Erikson (1968). The theory of attachment was originally developed by John Bowlby, a British theorist who attempted to understand the intense distress experienced by infants who had been separated from their parents. At the time, psychoanalytic writers held that these behavioural and emotional expressions (crying, clinging) were manifestations of immature defence mechanisms that were operating to repress emotional pain. But Bowlby (1988) noted that such expressions are common to wide mammalian species, and speculated that these behaviours may be serving an evolutionary function. Bowlby (1988) argued that the attachment system develops in the first three years of life to ensure proximity to the caregiver, thereby managing the anxiety associated with the fear of abandonment.

The theory regards the mother as a secure base, a point of reference and protector of the developing child, and recognises that this role is life-long to the recipient. Although attachment first develops in infancy, individuals continue to need a secure base in adulthood (Bowlby, 1988).

The attachment system explains the ‘working models’ of the parent-child relationship that allow for the planning of goal-corrected behaviour (Bowlby, 1988) and appraising novel situations (Bretherton, 1985). ‘Working models’ have been the dominant exploratory mechanisms linking attachment in infancy to attachment at later age including adulthood.

According to attachment theory (Bowlby, 1969), human beings are innately programmed to seek and form attachments with others. The theory assumes that the developing infant’s early attachment-related experiences are in time represented cognitively as an internal working model of self and other. Exploratory interest is also implicated in Erikson’s lifespan model of development, particularly during the adolescent phase of identity formation (Erikson, 1968).

Erikson believed that adolescents who have successfully resolved childhood issues of trust, autonomy, initiative, and industry are well prepared to take on young adult challenges of crafting a personal identity.

Although the theories of attachment and identity have been developed separately, several authors have tried to explore empirically the connections between the constructs derived from the theories. Attachment theory and identity theory both offer interesting insights that would contribute to our understanding of adolescents' exploratory interests. Attachment theory argues that psychologically separating from childhood attachment figures would be particularly distressing without mental representation of a soothing and reassuring other on which to rely (Bowlby, 1988).

Securely attached individuals are open to the intellectual and environmental exploration that underlies identity formation (Erikson, 1968; Marcia, 1980). Identity theory suggests that individuals possessing a high degree of trust, autonomy, initiative, and industry have more adequate psychological resources to withstand the threats to self that often accompany exploration.

2.4.1 Attachment Theory

John Bowlby, a former psychoanalyst, introduced attachment theory in the late 1950's. In the following two decades, numerous other researchers elaborated upon this theory, which integrates viewpoints from psychoanalysis, cognitive psychology, systems theory and etiology (; Holmes, 1993; Levy, 2000; Mikulincer, & Shaver, 2001).

Attachment theory is proposed as an alternative theory about the nature of all human beings. It touches on several critical elements of an individual's emotional life, including the tendency to form attachment bonds, the role of the caregiver, the anxiety and angers which separation and loss provoked, and the nature of grieving for the loss of an attachment figure (Manassis, 2001).

Attachment theory states that a child's first relationship is a love relationship that will have profound long-lasting effects on an individual's subsequent development. Closeness to the attachment figure provides protection and a psychological sense of security (Egeland, & Susman-Stillman, 1996; Holmes, 2001). Attachments should lay a good foundation for being able to form other secure relationships, to seek support when needed, and to draw strengths from the support which is given.

A caregiver who is reliably available and responsive to the child's needs forms the basis for secure attachment, for competence in exploring the environment and forming other relationships, and for developing self-esteem (Holmes, 2001). Changes in attachment behaviour and in one's representational models of attachment relationships can develop from developmental changes and/or changes in experience, especially with another attachment figure (Main, 1990).

Within attachment theory, representational models play a significant role. These unconscious structures are mental representations of the self and others, based on early experiences in first relationships (Holmes, 2001).

They set the stage for interactions with new social partners and have long-term consequences for shaping personality, organizing behaviour, and developing close relationships. Bowlby (1988) asserted that it is not uncommon for a person to hold conflicting internal models of an important relationship. One model may develop largely from a child's direct experience with a care giver; while another may result from cognitive input, for example, statements from the parents that do not support the experience.

In the 1960's, Mary Ainsworth, one of Bowlby's colleagues, conducted seminal longitudinal studies of 26 pairs of mothers and babies in their natural settings (Holmes, 1993).

Trained observers visited the subjects in their homes in Baltimore and Maryland, for four hours at a time, every three weeks during the first year making notes on the infants' behaviour and mothers' sensitivity in responding to the infants (Holmes, 1993).

At the time these babies were approaching their first birthdays, Ainsworth and her colleague, Barbara Witting, developed the Strange Situation, a semi-standardized laboratory procedure for observing babies' responses to being in a new place, meeting an adult female stranger, being separated from the mother for a brief period, and being left alone in an unfamiliar place for a brief period. At age one, 23 of the 26 infants in the Baltimore study were among the 106 babies on which Ainsworth reported (Holmes, 2001).

The strange situation model proved to be a rich source of data about attachment patterns, and has since been used to assess thousands of infants. In this technique, highly experienced coders use scales to rate the intensity of interactive behaviour in four areas: proximity and contact seeking, contact maintaining, resistance, and avoidance. Then they categorized the infants' patterns of either attachment behaviours as secure or anxious (Holmes, 1993).

Ainsworth (1989) described three major categories of attachment: secure, anxious/avoidant, and anxious/ambivalent. After years of traditional research by many investigators, Main (1990) identified a fourth pattern: anxious/disorganized/disoriented (Ainsworth, 1989; Holmes, 1993).

2.5 Prevalence of attachment styles and identity among different cultures

2.5.1 Prevalence of attachment styles among different cultures

Given Bowlby's proposal that the attachment bond develops from birth and that it promotes survival in the young infant, it is not surprising that the majority of research focused on infancy or early childhood. It is equally not surprising that methods and measures for assessing attachment have been developed primarily for these early years of life.

Methods like the 'strange situation' experiment were used to measure the attachment of infants to their caregivers. Ainsworth's (1978) breakthrough with the research led to several research projects being carried out. Not only was Ainsworth's hypothesis tested in Western European countries like Sweden (Lamb, 1982), the former West Germany (Grossmann, Grossmann, Huber, & Wartner, 1981), but also in Japan (Durrett, Otaki, & Richards, 1984; Bretherton, & Waters, 1985; Takahashi, 1986), Israeli (Bretherton et al., 1985) and Africa (Kermoina, & Leiderman, 1986).

The similarities of findings simply meant that attachment is a universal concept. However, sometimes there were differences of results, leading to some commentators saying that the concepts appear not to apply equally for all countries. Van IJzendoorn and Kroonenberg (1988) have identified samples that deviate clearly from the original distributions presented by Ainsworth et al. (1978); Japanese and Israel samples in direction of a higher proportion of type C patterns and North German sample in the direction of a higher proportion of type A patterns. This simply means that attachment, when assessed with different measures, turns not to be accurate as other measures are too stressful for other populations to bear.

2.6 Integration

The theory of attachment was originally developed by John Bowlby (1907-1990), the theorist who attempted to understand the intense distress experienced by infants who had been separated from their parents. According to Erikson (1968, 1977), the development of identity proceeds through eight life stages, each of which represents a period of heightened potential and increased vulnerability of a particular component of the personality.

The identity formation process shares certain basic tenets with traditional attachment theory. In general, the two paradigms both indicate that security, exploration, and development are influenced by relationships with parents and that behaviour is guided by constructions of perceptions of self and the environment (Benson et al., 1992).

Erikson (1959, 1980) postulated that the relationship between the mother and the infant is a catalyst for identity development. The concept is advanced by Bowlby (1969; 1984); he defines the mother as a 'secure relational base', whose primary function incorporates identity development and the reduction of psychological distress.

Both Erikson (1980) and Bowlby (1980) adhere to some form or another of the epigenetic principles of psychological development. The essence of the principle is that the quality and direction of early psychological development, is formative of later stages of development. For instance, developing trust in the early maternal relationship sets the stage for identity achievement in later life (Erikson, 1959, 1980) and (Hoegh, & Bourgeois, 2002).

Attachment theory was originally developed to explain the bond between infants and their caregivers, and it has become an important theory to explain the lasting influence of close relationships on an individual's psychological well being.

The basic premise of attachment theory is that individuals' experiences with the emotional availability of attachment figures in their lives shape their feelings of felt security and trust in others (Bowlby, 1980). As a result of their early experiences with caregivers, individuals construct internal working models of themselves, others, and relationships used to guide their expectations in subsequent close relationships (Bretherton, 1990).

Psychoanalytic writers held that these behavioural and emotional expressions (crying, clinging) were manifestations of immature defence mechanisms that were operating to repress emotional pain but Bowlby noted that such expressions are common to wide mammalian species, and speculated that these behaviours may be serving an evolutionary function. Bowlby (1988) argued that the attachment system develops in the first three years of life to ensure proximity to the caregiver, thereby managing the anxiety associated with the fear of abandonment.

Specifically, adolescence is supposed to be a period where internal working models may finally stabilize, and as consequence, would be rather resistant to change. As competencies grow during the teenage year, attachment behaviour is elicited less often compared to infancy. In addition, it is less likely to be expressed by seeking direct physical proximity but rather by communicating one's feelings and concerns to the caregivers when needed (Bowlby, 1980 & Bretherton, 1990). Longitudinal studies from infancy to childhood showed a high stability of infant attachment organization.

Discontinuity of attachment was explained by changes in the care giving system. Thus, the stability of the care giving conditions is one influential factor for the stability of attachment organisation in childhood (George, & Solomon, 1999; Grossmann, Grossmann, & Zimmermann, 1999). As attachment organization childhood already is very stable, a high stability of attachment patterns during adolescence can be expected. However, the assessment at both ages is different.

CHAPTER 3

PART ONE

3. METHODOLOGY

3.1 Research design

The researcher used questionnaires, within a cross-sectional design to gather data. Identity development was the dependent/predicted variable, attachment the independent/predictor variable and parenting was the control or mediating variable.

3.2 Description of the population

The population of the study consisted of learners from two high schools, namely, Makgoka and Marobathota High Schools. Both schools are located in the Limpopo Province. They have a predominantly African student body, and attract students from both rural and urban backgrounds, although the majority of them come from the former. Non-African and foreign students are not many, and can be estimated at less than 2%. The next table (Table 1) shows the description and demographics of the participants with regard to their gender, age, home base, and parent's occupation.

3.3 Plan for analysis of data

Data was processed using the SPSS 14.0 (SPSS Inc., 2008). Results were obtained using frequencies, correlation coefficient, and regression analysis. Before conducting statistical analyses, data was checked and cleaned. Missing values were replaced with mean scores for the particular items. Frequencies were used for the description of the sample.

Two hundred and one (64.8%) of the participants came from a rural home background, and hundred and nine (35.2%) were urban-based. The participants were between the ages of 12 and 15. Out of the 310 who mentioned their gender, 200 (64.5%) were females. Further details of the sample characteristics are shown in table 1.

Hundred and seventy five (56.5%) learners reported that their mothers' occupation was in the formal sector, 51 (16.5%) informal and 84 (27.1%) were unemployed. Two hundred and three (65.5%) reported their fathers' occupation to be in the formal sector, fifty three (17.1%) informal, and fifty one (16.5%) unemployed

Table 1: Demographics of the participants

Demographics	N	%
Gender		
Male	110	(35.5)
Female	200	(64.5)
Age		
12	8	(3%)
13	72	(23%)
14	131	(42%)
15	99	(32%)
Domicile		
Rural	201	(64.8)
Urban	109	(35.2)
Mother's occupation		
Professionals	175	(56.5)
Non-Professionals	51	(16.5)
Unemployed	84	(27.1)
Father's occupation		
Professionals	203	(65.5)
Non-Professionals	53	(17.1)
Unemployed	51	(16.5)

Note: N = 310

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 school as per appointment. Participants were recruited in groups from classrooms, and some were contacted in their respective hostel rooms.

IPPA-R has been used across social and cultural contexts; and this can have implications on the results. It is for this reason that the sample of this study, as a precaution, was limited to Africans.

3.5 Procedure

After the proposal for the study was approved by the University Ethics Committee, the researcher approached the Department of Education in Polokwane (Limpopo Province) for permission to conduct the study in two local high schools. After the permission was granted, the researcher approached the students in their classrooms, with the cooperation of the concerned teachers, and some of the participants were approached in their hostel rooms.

In all instances, the researcher began by outlining the instructions of filling the 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 they could.

It took the participants an average of 45-50 minutes to complete the questionnaires. However, grade 8 students took longer than others as they had difficulty understanding some items of the questionnaire. The researcher decided to help them by reading all the items out loud and explained where there was a need.

Most of the students 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 were collected by the researcher on the very same day after they had been filled. The questionnaires included a demographic factors section, the IPPA-R (Gullone & Robinson, 2005) & Oche's (Ochse, 1983 (cf. Ochse & Plug, 1986); Ochse & Plug, 1986).

3. 6 Instruments

3.6.1 Demographic questionnaire

The demographic section included: (1) age, (2) gender, (3) domicile, and (4) parents' occupation.

3.6.2 The Inventory of Parent and Peer Attachment Revised (IPPA-R; Gullone & Robinson, 2005)

The IPPA-R (Gullone & Robinson, 2005) is a revised version of the Inventory of Parent and Peer Attachment (IPPA, Armsden & Greenberg 1987). The IPPA is among the best-known and widely used attachment scales. In recent times, the IPPA has become one of the leading instruments in the studies that assess attachment.

The current study uses IPPA-R, which is a 53-item self-report questionnaire. This instrument is designed to measure aspects of current parenting experiences and peers along the three dimensions of attachment styles, namely, Trust (T), Communication (C), and Alienation (A). The inventory uses a 5-point Likert scale, with responses ranging from ‘strongly disagree’ to ‘strongly agree’. Examples of items can be found in table 2 below.

Table 2: Sample items from the IPPA-R (parent attachment items)

Item No.	Item Content	Scale				
2	My mother is a good parent. (T)	1	2	3	4	5
10	My father expects too much from me. (A)	1	2	3	4	5
21	My mother understands me. (C)	1	2	3	4	5

Note: T = Trust, C = Communication, and A = Alienation.

The IPPA-R was developed from the IPPA, a reliable and valid measure (Armsden & Greenberg, 1987; Papini, Roggman & Anderson, 1991). The IPPA-R itself is highly reliable. Its Cronbach’s alpha coefficients for the parent scale were from $r = .86$ to $.91$ (Gullone & Robinson, 2005). Further analyses of the IPPA-R reliability demonstrated that they did not differ by age or gender group. The original version of the scale, the IPPA, showed three weeks test-retest reliabilities of $r = .93$ for the parent attachment measure, and $r = .86$ for the peer attachment measure.

In the present study, the standardized reliability coefficient for the parent subscale was $r = 0.38$ (Trust). It was apparent that there was one problematic item in the parent trust subscale, and when the item was removed, Cronbach’s alpha of the parent trust subscale improved to $r = .56$, 0.66 (Communication), and $r = .69$ (Alienation).

3.6.3 Ochse's Erikson Scale (Ochse, 1983, Ochse & Plug, 1986)

The Oche Erikson Scale was developed by Ochse (1983). It was developed in cooperation with the University of South Africa's (UNISA) second and fourth year students, who recruited four subjects, one in each of four age groups: 15-19, 20-24, 25-39, and 40-60 years. It is a 93-item, self-report questionnaire. This is designed to measure personality components along seven dimensions, namely, Trust (T) vs. Mistrust (M), Autonomy (A) vs. Shame (S), Initiative (Ini) vs. Guilt (G), Industry (Ind) vs. Inferiority (Inf), Identity (Id) vs. Identity Formation (Idf), Intimacy (In) vs. Isolation (Iso), and Generativity (G) vs. Stagnation (S), that, according to Erikson, are formed before the onset of old age. The inventory uses a four-point Likert scale, with responses ranging from 'never' (0), 'occasionally or seldom' (1), 'fairly often' (2), and 'very often' (3). Examples of items are in table 3 below.

Table 3: Sample items for the Ochse's Erikson Scale

Item No.	Item Content	Scale					
31	I feel people distrust me. (T vs. M)	0	1	2	3	4	
32	I am unnecessarily apologetic. (A vs. S)	0	1	2	3	4	
5	I make the best of my abilities. (Ind vs. Inf)	0	1	2	3	4	
70	People seem to disapprove of me. (Id vs. Idd)	0	1	2	3	4	

Note: T vs. MS = trust vs. mistrust, A vs. S = autonomy vs. shame and doubt, Ind vs. Inf = industry vs. inferiority, Id vs. Idf = identity vs. identity formation

The reliability coefficients were as follows: $r = 0.71$ Trust (T), $r = 0.71$ Autonomy (A), $r = 0.70$ Initiative (I), $r = 0.62$ Industry (Ind), $r = 0.84$ Identity (Id), $r = 0.70$ Intimacy (In) and $r = 0.65$ Generativity (G) (Oche, 1983, Plug, 1986). In this study, only the first six subscales of Oche's Erikson Scale are used. The Cronbach's alpha coefficients were computed to estimate internal consistency for the scale. Standardized reliability coefficients for the subscales were as follows: $r = 0.21$ Trust vs. Mistrust (T vs. M), $r = 0.39$ Autonomy vs. Shame (A vs. S), $r = 0.44$ Initiative vs. Guilt (I vs. G), $r = 0.45$ Industry vs. Inferiority (Ind vs. Inf), $r = 0.61$ Identity vs. Identity Formation (Id vs. Idf).

CHAPTER 4

4. RESULTS

4.1 Presentation of results

In the data some of the items in the Ochse Erikson Scale were reverse scored, while data was checked for errors and the reliability coefficients measured. Some of the reliability coefficients of Ochse's Erikson Scale were unacceptably low (see page 32 above). A decision was taken to include in the analysis only those scales whose Chronbach's alpha coefficients were 0.35 or better. The decision was guided by Cuieford (1965), who states that any Cronbach's α from 0.35 upwards is acceptable for purposes of analysis.

The means of the groups were compared to establish if attachment styles can predict identity development, also to investigate the relationship between domicile (rural/urban) and attachment, and investigate the relationship between domicile (rural/urban) and identity. In the current study, identity development was the dependent variable, and attachment was the independent/predictor variable. Parenting was also measured as a mediating variable.

4.2 Hypothesis 1

Hypothesis 1 predicted that attachment styles will be affected by the participants' home background (i.e., domicile). To obtain information regarding domicile, participants were asked to state whether their places of origin are located in the urban or rural areas. The results of *t*-test analysis were not in accordance with the hypothesis as there were no mean differences observed on four of the six subscales of the IPPA-R (see table 4). Only means of "parent communication" and "peer alienation" subscales were significantly different from one another. Thus, the hypothesis is rejected.

Table 4: T-test analysis, a mean comparison between attachment styles, identity and domicile (N = 310).

	Urban \bar{X} (SD)	Rural \bar{X} (SD)	df	t	p
Parent Attachment					
Parent Trust	33.38(3.58)	33.77 (3.04)	307	-1.005	.131
Parent Communication	37.00(5.85)	37.49 (4.75)	186.13	-.802	.027
Parent Alienation	29.23 (8.38)	28.67(7.61)	307	.600	.168
Peer Attachment					
Peer Trust	36.83 (5.12)	36.55 (4.67)	307	.504	.378
Peer Communication	37.15 (5.25)	35.68 (5.48)	308	2.282	.732
Peer Alienation	18.099(5.26)	17.96 (4.38)	190.03	.235	.024
Oche's Identity Scale					
Autonomy vs. Shame	14.94(3.10)	15.31 (3.79)	306	-.933	.971
Initiative vs. Guilt	21.21(4.27)	20.67(4.43)	307	1.039	.946
Industry vs. Inferiority	19.83(4.17)	19.53 (4.21)	308	.607	.653
Identity vs. Identity Formation	32.79(6.77)	33.82 (7.29)	303	-1.605	.347
Intimacy vs. Isolation	14.63(4.41)	14.88 (3.72)	189.66	-.591	.003

4.3 Hypothesis 2

Hypothesis 2 predicted that the development of identity will be affected by the participant's home background. The results of *t*-test analysis did not support the hypothesis since there was only one statistically significant difference of the mean scores between rural and urban participants (see table 4 above). Rural participants obtained a relatively large mean score on the Ochse identity subscale of Intimacy vs. Isolation.

4.4 Hypothesis 3

According to hypothesis 3, healthy attachment styles were expected to predict the development of higher levels of identity among the participants. The researcher decided to conduct regression analysis in order to determine if attachment styles would predict identity development. However, correlation analysis was conducted as a prelude to regression analysis. The results of correlation analysis are in table 5. Correlations between ten of twelve pairs of variables were significant. According to the results, each of the identity subscales (namely, Autonomy vs. Shame, Initiative vs. Guilt, Industry vs. Inferiority, and Identity vs. Identity Formation) were each related to the attachment subscales of Trust, Communication and Alienation. However, the Autonomy vs. Shame subscale was related to Alienation only. All the identity subscales were negatively related to Alienation, and this was in the right direction considering that Alienation was keyed as the opposite of attachment.

Table 5: Correlation analyses

Identity Subscales	Attachment Subscales	<i>r</i>	<i>p</i>
Autonomy vs. Shame	Trust	.070	.220
	Communication	.094	.101
	Alienation	-.323	.000
Initiative vs. Guilt	Trust	.133	.019
	Communication	.216	.000
	Alienation	-.275	.000
Industry vs. Inferiority	Trust	.124	.030
	Communication	.165	.003
	Alienation	-.354	.000
Identity vs. Identity Formation	Trust	.206	.000
	Communication	.304	.000
	Alienation	-.344	.000

Note: 1 = Autonomy vs. Shame, 2 = Initiative vs. Guilt, 3 = Industry vs. Inferiority, 4 = Identity vs. Identity Formation.

Regression analysis was then conducted, given that identity and attachment subscales were related in almost all instances. Each of the identity subscales were alternately entered in turn as dependent variables and attachment subscales were considered to be predictor or independent variables in a series of multiple regression analyses. The first regression analysis, with the Autonomy vs. Shame subscale entered as the dependent variable, indicated that alienation negatively contributes to the development of identity.

On the second series, with the Initiative vs. Guilt subscale entered as the dependent variable, both communication and alienation contributed to the development of identity although alienation contributed negatively. The results of the third and fourth series, with the Industry vs. Inferiority and Identity vs. Identity Formation subscales entered as dependent variables, indicated that on both occasions alienation contributed negatively to the development of identity, and communication, on the fourth series, contributed positively to the development of identity. The results are shown in table 6.

Table 6: Regression analyses

Identity Scales	Attachment Subscales	B	T	P
1	Trust	-.014	-.212	.832
	Communication	.038	.569	.570
	Alienation	-.322	.5.858	.000
2	Trust	-.003	-.045	.964
	Communication	.178	2.689	.008
	Alienation	-.248	-4.509	.000
3	Trust	.020	.301	.763
	Communication	.101	1.553	.121
	Alienation	-.335	-6.207	.000
4	Trust	.030	.475	.635
	Communication	.244	3.870	.000
	Alienation	-.307	-5.863	.000

Note: 1 = Autonomy vs. Shame, 2 = Initiative vs. Guilt, 3 = Industry vs. Inferiority, 4 = Identity vs. Identity Formation.

CHAPTER 5

5. DISCUSSION OF RESULTS

5.1 Introduction

In the present chapter, the researcher discusses the results in terms of the original hypotheses with regard to the literature that was reviewed. The meaning, implication of the study, results, and the congruence or lack of congruence with the results of other studies are all explored. The primary variables of attachment and identity development are discussed.

5.2 The relationship between domicile (rural or urban) and attachment styles

The results of the current study showed no relationship between domicile and attachment to mother and to father. Erikson speculated that there is a relationship between the environment (rural or urban) and identity development, the researcher assumed that the same would apply with attachment. However no literature on the assumption was found.

5.3 The relationship between domicile (rural or urban) and identity development

The present study found no relationship between domicile (rural or urban) and identity development. The results are not in accordance with the previous studies (Nurmi, Poole, & Kalakoski, 1996), which indicated that adolescent' identity progresses differently in urban and rural environments. Marcia (1980) reported that an age-related increase in identity exploration and commitment may be dependent on their socio-cultural context. Adolescents either live in rural or urban areas.

5.4 Attachment styles predict identity development

In this study, regression analysis was conducted to investigate the whether attachment will predict identity development. The results found an association between some aspects of attachment styles and identity development. These findings are not supported by some of the previous studies (Quintana & Lapsley, 1987; Kroger & Haslett, 1988; Frank et al., 1990), which failed to find the relationships between attachment and identity and to show that differences in attachment can be used to predict differences in identity. On the other hand, there are studies whose findings are supported by the results of the present study. A study by Lapsley et al. (1990), has found that personal and social identity was significantly predicted by attachment to parents in two separate college samples. Zimmermann and Becker-Stoll (2002), Berman, Rodrigue, Wees, and Zamora (2006) also found a relationship between attachment stability and identity development in their study amongst adolescents and college students, respectively.

Furthermore, Benson et al. (1992) also found an association between identity and attachment and also showed that identity achievement, independent of adolescent gender, was related to the adolescents' attachment to their mothers but not to their fathers. His findings also support the findings of the current study.

Hoegh and Bourgeois (2002) studied 79 undergraduates and the results indicated that identity achieved individuals showed higher levels of secure attachment and diffused individuals showed higher levels of fearful attachment. Individuals in moratorium also scored high in secure attachment. This may imply that Hoegh and Bourgeois's (2002) findings indicated that there is a certain level of relationship between attachment styles and identity development.

Furthermore, Reich and Siegel (2002) also found a strong relationship between attachment styles and identity in their study amongst university students.

The researcher was faced with the dilemma of low reliability levels of most of the Ochse Eriskon sub-scales. However, a cut-off level of the alpha values was decided based on Cuieford's (1965) guidance. Cuieford states that any Cronbach's alpha from $\alpha = 0.35$ upwards is acceptable for purposes of analysis.

The whole study has two parts; where the second part replicated the first one, differing only with the identity scales used. It was identified that the identity scale appeared to be problematic as its Cronbach alpha were $\alpha = .35$ or below and not appropriate to work with.

CHAPTER 6

PART TWO

6. METHODOLOGY

6.1 Description of the population

The population of the study consisted of learners from two high schools (Motsemaria High School and Pax College) of Limpopo Province. The high schools have a predominantly African student body, and attract students from both rural and urban backgrounds. Non-African and foreign students are not many, and they can be estimated at less than 2%. The next table (table 7) shows the description and demographics of the participants with regard to their gender, age, home base, parent's occupation, number of people per household, and learner's grade.

The questionnaires included a demographic questionnaire, Inventory of Peer Parent Attachment Revised, the Marlowe-Crowne Scale, A New Inventory for Examining Erikson's Stages of Psychosocial Development, The Psychosocial Inventory of Ego Strengths, and A Short Measure of Eriksonian Ego Identity.

The results showed that 31.8% male participants and 68.2% female participants were aged 13. Amongst the 14 year olds, 61.5% males and 38.5% females were aged 14. Forty-three and three percent (43.3%) of male participants were aged 15 and 56.7% of female participants were aged 15. The results indicate that 61.1% of the male participants were from urban areas and 38.9% of females were from urban areas. Fifty-three and seven percent (53.7%) of the female participants were from the rural areas and 46.3 % of the male participants were from rural areas. See table 7 for information.

Table 7: Demographic information of the participants

Variables	Male		Female		Total	
	N	%	N	%	N	%
Gender	113	100%	108	100%	221	100%
Age						
13	7	6.2%	15	13.9%	22	10.0%
14	67	59.3%	42	38.9%	109	49.3%
15	39	34.5	51	47.2%	90	40.7
Domicile						
Urban	44	38.9%	28	25.9%	72	32.6%
Rural	69	61.1	80	74.1%	149	67.4%
Mother's occupation						
Professionals	97	85.5%	78	72.2%	175	79.2%
Non-Professionals	9	8.0%	19	17.6%	28	12.7%
Unemployed	7	6.2%	11	10.2%	18	8.1%
Father's occupation						
Professionals	78	69.0%	78	72.2%	156	70.6%
Non-Professionals	25	22.1%	22	20.4%	47	21.3%
Unemployed	10	8.8%	8	7.4%	18	8.1%
Mother' level of education						
Grade Six – Grade Twelve	27	23.9%	21	19.5%	48	43.4%
Degree/Diploma	34	30.1%	29	26.9%	63	57.0%
Honours	21	18.6%	29	26.9%	50	45.5%
Masters	31	27.4%	29	26.9%	60	54.3%
Father' level of education						
Grade Six – Grade Twelve	25	22.2%	14	13.0%	39	35.2%
Degree/Diploma	32	28.3%	31	28.7%	63	57.0%
Honours	16	14.2%	38	35.2%	54	49.4%
Masters	36	31.9%	24	22.2%	60	54.1%
Family structure						
Both parents	73	64.6%	58	53.7%	131	59.3%
Single parent	0	0.0%	12	11.1%	12	5.4%
Blended	11	9.7%	32	29.6%	43	19.5%
Extended	29	25.7%	6	5.6%	35	15.8%

Note. For the purpose of reporting, both Mother' and Father' level of education were grouped, they were considered continuous in the actual analysis.

6.2 Method and Procedure

The sampling method and procedure used in part two is similar to those used in part one.

6.3 Instruments

6.3.1 Demographic questionnaire

Demographic details were obtained using the following variables: (1) age, (2) gender, (3) domicile, (4) family structure, (5) parent's occupation, and (6) participants' and their parent's educational level.

6.3.2 The Inventory of Parent and Peer Attachment Revised (IPPA-R; Gullone, & Robinson, 2005)

The IPPA-R was used in part one and was described there. More specifically, the descriptions and psychometric properties still apply. In the present study further computations of the Cronbach's alpha coefficients (α) were conducted to estimate the internal consistency of the instrument in the fresh sample. Standardized reliability coefficients for the attachment-to-mother subscales were $r = .60$, $.68$ and $.62$ for the trust, communication, and alienation subscale, respectively. On the other hand, coefficients for the attachment-to-father subscales were $r = .81$, $.84$ and $.69$ for the trust, communication, and alienation subscales, respectively.

This instrument is designed to measure current parenting experiences and peers along the three dimensions of attachment, namely, Trust (T), Communication (C), and Alienation (A). IPPA-R is a 53-item, self-report questionnaire. It uses a 5-point Likert scale, with responses ranging from 'strongly disagree' to 'strongly agree'. Sample items are in table 8.

Table 8: Sample items for the IPPA - R (parent attachment items)

Item No.	Item Content	Scale				
2	My mother is a good parent. (T)	1	2	3	4	5
10	My father expects too much from me. (A)	1	2	3	4	5
4	My mother accepts me as I am. (T)	1	2	3	4	5
21	My mother understands me. (C)	1	2	3	4	5

Note: T = Trust, C = Communication, and A = Alienation.

6.3.3 Erikson's Stages of Psychosocial Development (EPSI; Rosenthal et. al., 1981)

The EPSI is an inventory developed by Rosenthal et al. (1981). It is a 72-item, self-report questionnaire. This is designed to measure identity development from early adolescence. EPIS measures identity development amongst adolescents on six subscales, but for the purpose of the present study, four subscales were utilised, namely, Trust, Autonomy, Industry and Initiative. The inventory uses a 5-point Likert scale, with responses ranging from 'almost always true', to 'hardly ever true'. Examples of items from the scale can be found in table 9.

Table 9: Sample items for the EPIES Scale

Item No.	Item Content	Scale				
3	I wish I had more self-control. (T)	1	2	3	4	5
1	I am able to take things as they come. (A)	1	2	3	4	5
7	I am able to be first with new ideas. (Ini)	1	2	3	4	5
11	I feel mixed up. (I)	1	2	3	4	5

Note: T = Trust, A = Autonomy, Ini = Initiative, I = Identity

The EPIS was administered to 622 adolescents, 320 from year 9 (141 males, 179 females) and 302 from year 11 (146 males, 156 females). The sample was drawn from nine Melbourne metropolitan high schools (Rosenthal, Gurney, and Moore, 1981). Alpha coefficients were calculated using this test sample, and they were $r = 0.69$ Autonomy, if item 62 is removed; $r = 0.64$ Initiative if item 46 is removed; and 0.68 Trust if item 20 is removed.

In the present study, the Cronbach's alpha coefficients were computed to estimate the internal consistency of the EPSI. Standardized reliability coefficients for the EPSI subscales were $r = .34$ (Trust), $r = .59$ (Autonomy), and $r = .54$ (Initiative), $r = .68$ (Industry). Some of the subscales of the measure were not used in the present study because of their lack of acceptable reliability.

6.3.4 Psychological Inventory of Ego Strengths (PIES; Markstrom et al., 1997)

The PIES was developed by Markstrom et al. (1997). It is a 64-item, self-report questionnaire.

This is designed to measure ego strengths along eight dimensions; namely, Hope versus Withdrawal, Will versus Compulsion, Purpose versus Inhibition, Competence versus Inertia, Fidelity versus Role Reputation, Love versus Exclusivity, Care versus Rejectivity, and Wisdom versus Disdain. The inventory uses a 5-point Likert scale format to elicit responses, with responses ranging from 'describes me very well', to 'does not describe me well'. Examples of items from the scale can be found in table 10.

Table 10: Sample items for the PIES Scale

Item No.	Item Content	Scale
19	In many ways, I have control over my future. (W vs. C)	1 2 3 4 5
40	Fear keeps me from striving for my goals. (P vs. Inh)	1 2 3 4 5
8	When I think about the future, I feel optimistic. (H vs. W)	1 2 3 4 5
61	Most people just seem more capable than me. (C vs. In)	1 2 3 4 5

Note: W vs. C = Will vs. Compulsion, P vs. I = Purpose vs. Inhibition, H vs. W = Hope vs. Withdrawal, C vs. I = Competence vs. Inertia

The PIES was given to 244 undergraduate females, 19-23 years of age, attending a university in Ontario, Canada. Only a small number of males completed the questionnaire; hence, it was determined to only include the females in the final sample (Markstrom et al., 1997).

The Cronbach's alpha of the eight item subscales of the PIES were $r = .83$ (Hope vs. Withdrawal), $r = .69$ (Will vs. Compulsion), $r = .52$ (Purpose vs. Inhibition), $r = .78$ (Competence vs. Inertia), $r = .62$ (Fidelity vs. Role Reputation), $r = .64$ (Love vs. Exclusivity), $r = .84$ (Care vs. Rejection), $r = .80$ (Wisdom vs. Disdain).

In the present study the Cronbach's alpha coefficients were computed to estimate the internal consistency of the PIES. Standardized reliability coefficients for the PIES subscales were $r = .43$ (Hope vs. Withdrawal), $r = .53$ (Will vs. Compulsion), and $r = .53$ (Purpose vs. Inhibition), and $r = .51$ (Competence vs. Inertia).

6.3.5 Tan's Eriksonian Ego Identity (Tan et al., 1977)

Tan's Eriksonian Ego Identity (Tan et al., 1977) was administered and the standardized reliability coefficient for the scale was $r = .24$. The results of the scale were not used in the present study because of lack of acceptable reliability.

6.3.6 Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960)

A version of the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) was used to measure the extent to which participants' responses reflect socially desirable behaviour.

The short form used in the present study is a 10-item self-report inventory (Strahan & Gerbasi, 1972). Participants responded “true” or “false” to a series of statements that describe common behaviours often seen as socially undesirable (e.g., “I like to gossip at times”). Some items were reverse scored in order to continue with the process of analyses.

Correlations between this short form and the complete Marlowe-Crowne Social Desirability Scale are reported to be $r = .85$ and above (Reynolds, 1982; Strahan & Gerbasi, 1972). The Cronbach’s alpha for the current study is $r = -.019$. It was apparent that there was one problematic item in the social desirability scale, and when the item removed, Cronbach’s alpha of the scale improved to .038. The results of the scale were not used in the present study because of lack of acceptable reliability.

6.4 Preliminary analysis of the data.

A short version of the Crowne-Marlowe scale (Strahan & Gerbasi, 1972) was administered to evaluate levels of socially desirable responding among participants. The Cronbach's alpha of the scale obtained in the present sample was $r = .38$ ($N = 221$). The results of the scale were not used in the present study because of lack of acceptable reliability. Table 10 shows a preliminary analysis, which includes gender and demographic variables.

T-test was used to compare the two gender groups on all the scales, to see whether analysis should proceed with a combined gender group or gender separated. The results indicate that the two groups differ significantly on most of the scales. Eight of thirteen scales indicated significant differences and two of the significant scales were marginally significant. Six of the scales indicate significant differences in terms of gender, thus analysis will continue with groups combined (See table 11).

Table11:**T- test and chi-square analyses of variables**

	Gender	N	\bar{X}	SD	t	df	<i>p</i>
<u>Attachment</u>							
Father Trust	Female	108	32.407	3.488	1.763	219	.079
	Male	113	31.628	3.077			
Father Communication	Female	108	35.102	4.891	2.177	219	.031
	Male	113	33.717	4.566			
Father Alienation	Female	108	26.796	6.266	-.573	219	.567
	Male	113	27.283	6.367			
Mother Trust	Female	108	31.398	4.039	.683	219	.495
	Male	113	31.018	4.230			
Mother Communication	Female	108	32.528	6.254	.249	219	.804
	Male	113	32.319	6.241			
Mother Alienation	Female	108	27.139	6.346	.964	219	.336
	Male	113	26.327	6.164			
<u>Rosenthal Identity Stages</u>							
Autonomy	Female	108	49.870	6.310	2.986	219	.003
	Male	113	47.558	5.172			
Initiative	Female	108	46.732	5.859	2.464	219	.015
	Male	113	44.841	5.548			
Industry	Female	108	47.972	6.691	1.789	219	.075
	Male	113	46.389	6.465			
<u>Markstrom et al. Ego Strengths</u>							
Hope and Withdrawal	Female	108	30.648	4.443	5.158	219	.000
	Male	113	27.646	4.209			
Will and Compulsion	Female	108	31.676	4.407	4.569	219	.000
	Male	113	29.035	4.185			
Purpose and Inhibition	Female	108	30.574	4.452	4.204	219	.000
	Male	113	28.035	4.521			
Competence and Inertia	Female	108	26.898	4.501	1.217	219	.225
	Male	113	26.212	3.867			

6.5 Main Analysis

6.5.1 Hypothesis 1

Hypothesis 1 predicted that attachment styles will be affected by the participant's home background (i.e., urban or rural domicile). To obtain information regarding domicile, participants were asked to state whether their places of origin are located in the urban or rural areas. The results of t-test analysis lead to acceptance of the hypothesis as there were no mean differences observed on five of the six subscales of the IPPAR-R (see table 12).

Table 12: T-test analysis, between attachment, identity and domicile

	Urban	Rural	F	t	df	Sig
<u>Attachment</u>						
Father Trust	30.61 (4.32)	31.48 (4.03)	.106	-1.450	219	.745
Father Communication	31.76 (6.54)	32.74 (6.08)	.074	-1.089	219	.785
Father Alienation	27.65 (6.60)	26.28 (6.05)	.581	1.540	219	.447
Mother Trust	31.847(3.47)	32.087(3.22)	.002	-.506	219	.969
Mother Communication	33.931(5.04)	34.617(4.62)	.077	-1.004	219	.781
Mother Alienation	27.388(5.61)	26.879(6.63)	1.681	.562	219	.196
<u>Rosenthal Identity Stages</u>						
Autonomy	48.88 (6.38)	48.60 (5.61)	.152	.330	219	.697
Initiative	45.47 (6.47)	45.91 (5.42)	1.816	-.523	219	.179
Industry	46.71 (7.12)	47.38 (6.36)	.252	-.710	219	.616
<u>Markstrom et.al.'s Ego Strengths</u>						
Hope and Withdrawal	28.81 (4.20)	29.26 (4.74)	1.154	-.695	219	.284
Will and Compulsion	29.68 (4.12)	30.64 (4.63)	.747	-1.491	219	.388
Purpose and Inhibition	29.50 (4.79)	29.17 (4.60)	.146	.496	219	.703
Competence and Inertia	26.40 (4.26)	26.62 (4.17)	.031	-.356	219	.861

Note: n = 221

6.5.2 Hypothesis 2

Hypothesis 2 predicted that the development of identity will be affected by the participant's home background. To obtain information regarding domicile (rural or urban), participants were asked to state whether their respective places of origin are located in the urban or rural areas. The results of t-test analysis did not support the hypothesis since there was no statistical difference of the mean scores between rural and urban participants (see table 12).

6.5.3 Hypothesis 3

In the current study, Hypothesis 3 was based on the assumption that healthy attachment styles are expected to predict the development of higher levels of identity among the learners. The findings of the current research revealed no significant association between attachment styles and identity development. Although the overall model across all functions was statistically significant Wilks's (λ) = .897 and .912, respectively, the facets were not statistically significant (see table 13). Thus the hypothesis was rejected.

Table 13: Canonical solution for mother attachment predicting identity development for functions 1 and 2

Variable	Function 1			Function 2			
	Coef.	r_s	r_s^2 (%)	Coef.	r_s	r_s^2 (%)	h^2 (%)
Trust	.647	.837	70.06	.812	.484	23.43	93.49
Autonomy	.152	.534	28.52	.041	-.414	17.14	45.66
Initiative	.558	.787	61.94	-.477	-.568	32.26	94.02
Industry	-.108	.572	32.72	-.570	-.619	38.32	71.04
R^2			67.00			36.00	
Trust	.250	.796	63.36	-.213	.012	0.01	63.37
Communication	.628	.923	85.19	.894	.366	13.41	98.06
Alienation	-.327	-.679	46.10	.966	.694	48.16	94.26

Note: Structure Coefficients(r_s), Community coefficients (h^2), Squared structure coefficient (r_s^2) Coefficient (Coef.)

Table14: Canonical solution for father attachment predicting identity development for functions 1 and 2

Variable	Function 1			Function 2			
	Coef	r_s	r_s^2 (%)	Coef	r_s	r_s^2 (%)	h^2 (%)
Trust	.932	.902	81.37	-.121	.226	05.11	86.48
Autonomy	.490	.472	22.28	-.459	.336	11.29	33.57
Initiative	-.412	.172	02.96	.806	.905	81.90	84.86
Industry	-.002	.326	10.63	.575	.786	61.78	72.41
R^{c2}			59.0			25.0	
Trust	.204	.847	71.74	.368	.139	01.93	73.67
Communication	.754	.970	94.09	-.832	-.233	05.43	99.52
Alienation	-.182	-.528	27.88	-.937	-.806	64.96	92.84

Note: Structure Coefficients(r_s), Communality coefficients (h^2), Squared structure coefficient (r_s^2), Coefficient (Coef.)

A canonical correlation analysis was conducted using the three attachment variables as predictors of four identity variables to evaluate the multivariate shared relationship between the two variable sets (i.e., parental attachment and identity). The analysis yielded three functions with squared canonical correlations (Rc^2) of .067, .036, .003 (mother variables), .059, .025, .006 (father variables) for each successive function. Collectively, the full model across all functions was statistically significant using the Wilks's (λ) = .897 criterion, $F(12, 566.48) = 1.975$, $P < .001$ (mother variables), and Wilks's (λ) = .912 criterion, $F(12, 566.48) = 1.171$, $P < .001$ (father variables).

Because Wilks' Lambda represents the variance unexplained by the model, 1- yields the full model effect size in an r^2 metric. Thus, for the set of three canonical functions, the r^2 type effect size was .103 (mother variables) and .088 (father variables), which indicates that the full model explained a minimum portion of about 10% (mother variables) and 8% (father variables) of the variance shared between the variable sets.

The dimensions reduction analysis allows the researcher to test the hierarchal arrangement of functions for statistical significance. As noted, the full model (function 1 to 3) was statistically significant. Functions 2 to 3 was also statistically significant, $F(6, 430) = 1,424$, $p < .001$. Function 3 did not explain a statistically significant amount of shared variance between the variable sets, $F(2, 216) = .271$, $p < .001$.

CHAPTER 7

7. DISCUSSION OF RESULTS

7.1 Introduction

In the present chapter, the researcher discusses the results by relating them to the existing literature. The results will be presented according to the hypotheses that were advanced. The primary variables of attachment and identity development 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.

7.2 The relationship between domicile (rural or urban) and attachment styles

The results of the current study showed a relationship between domicile and attachment to mother and attachment to father. Like Erikson (1980) speculated that there is a relationship between the environment (rural or urban) and identity development, the researcher assumed that, it is also applicable with attachment, but no literature on the assumption was found.

7.3 The relationship between domicile (rural or urban) and identity development

Theory predicts that the individual's environment has an impact on the development of identity (Yoder, 2000). The present study found no relationship between domicile (rural or urban) and identity development. The results were not in accordance with previous studies, which reported that adolescent identity development progresses differently in urban and rural environments (Nurmi et al., 1996).

Although other studies show differences in the development of attachment and identity, the current study differed. Both part one and part two of the study indicated that there is no relationship between the development of attachment and identity. This may be due to the sample used or the environment.

It may be that the participants, although coming from different environments (that is, rural and urban), being in the school environment could have impacted on the way their attachment and identity develops.

Furthermore, it may be that the participants have adopted common institutional culture or practices; it may be that they were different prior being in a boarding, and as time went on it may have evaporated. The results differ with those of the previous studies as they show no relationship between the developments of identity it may be due to the impact of the school practices.

Participants are from culture based schools were one is Catholics and the other Zionist, as Markstrom-Adam and Spencer (1990) found that adolescents identity formation is also motivated by the more frequent church attendance, this may also be the issue with the current study participants as most of the attend the same church based around the school, he further reported that religiosity is associated with the commitment statuses of identity. It may be that due to the religious practices at school, incorporated with individuals religious believes it was easier for them to follow one trend or even portray common form of identity. This may have resulted with the study not showing any differences among the development of both identity and attachment.

7.4 Attachment styles as predictors of identity development

In this study a no association was found between attachment styles and identity development. These findings are consistent with some of the studies that also failed to find a relationship between attachment styles and identity development (Frank et al., 1990; Kroger & Haslett, 1988; Quintana & Lapsley, 1987). The results of this study, together with previous studies have failed to show that attachment can be used to predict identity. Only Lapsley et al. (1990) found that personal and social identity could be predicted by attachment to parents in two separate college samples.

Benson et al. (1992) also found an association between identity and attachment and also showed that identity achievement, independent of adolescent gender, was related to the adolescents' attachment to their mothers but not to their fathers. Benson et al. (1992) findings also are in contrary with the findings of the current study.

Hoegh and Bourgeois (2002) studied 79 undergraduates and the results indicated that identity achieved individuals showed higher levels of secure attachment and diffused individuals showed higher levels of fearful attachment. Individuals in moratorium also scored high in secure attachment. This may imply that there is a certain level of relationship between attachment styles and identity development (Hoegh and Bourgeois, 2002).

CHAPTER 8

8. GENERAL DISCUSSION

Two studies were conducted, where the second study was a replication of the first one. The two studies differed mainly with the identity scales used. It was found that the Ochse Erikson Scale was problematic when used in the first study. Most of the subscales' Cronbach's alphas were .35 or below, and therefore not appropriate to conduct analysis with. Since the scales measured an important variable of the study, conclusions could not be based on unreliable measures. Therefore the researcher opted to replicate the study using different identity scales. However, the problem persisted as reliability levels remained low.

In general, this study examined the impact of domicile, or home background, on attachment and identity development. Furthermore, the studies investigated whether attachment styles can predict identity development. The results of both studies are similar. The overall results indicate that there is no connection between demographic factors and both attachment and identity development.

The results contradict existing research. Previous results reported that age-related increase in identity exploration and commitment may be dependent on whether an individual comes from an urban or rural area (Nurmi et al. (1996) & Marcia, 1980). Regarding identity, participants from urban areas tend to report a higher level of identity development compared to those who come from rural areas. In this study there were no differences between urban and rural dwellers. It is not clear from the available information what the reasons for the outcome could be. It could be that the home backgrounds of the participants are more similar, or they share common rearing experiences,

Healthy attachment styles are expected to indicate the development of higher levels of identity among participants. Between the two studies, the observation was different as the one found an association and the other was unable to find such an association. In both studies, it was identified that identity scales appeared to be problematic as in the first substudy. Using a South African identity scale, Cronbach alphas of the subscales were low but above .35. In the second substudy the researcher worked with alternative identity scales (United States Scales) were the Cronbach alphas of the subscales dramatically improved, but they were still problematic as the others were not appropriate to work with.

There is a common observation across these two studies as it appears that the identity scales appears to be problematic (i.e., Ochse's Erikson Scale, Markstrom et al., Ego Strength and Rosenthal Identity Stages). The impact may be the raised issue of the universality of the concept "identity" and its applicability amongst African populations.

CHAPTER 9

9. CONCLUSIONS

9.1 Conclusion

The current study highlights that there is no significant difference between where the participant is from and better education in influencing a person's development in identity and attachment styles. Efforts should be made to encourage and educate those from poorer backgrounds in rural areas about parenting that will later elicit better exploratory interests in their adolescents. Education about forming good relationships with parents should also be improved among younger people especially those still in high school level of education.

Although belonging to a two-parent family is generally associated with better outcomes in many life spheres, there was no significant difference with the other family types on the development of identity and attachment. In conclusion, the results of the present study indicate no levels of the development of identity and attachment amongst early and mid-adolescents in boarding schools.

9.2 Limitations of the current study

Limitation to the study maybe the fact that both high schools used were based in rural areas (Boyne and Ga-Matlala), and this may have impacted on getting equal representation from either rural or urban area and the sample was dominated by the rural participants.

The validity of translating the questions to the participant's home language (Sepedi) may have had an impact on the original phrasing of the question. The fact that scales used to collect data were standardized amongst university students and used amongst high school students.

Many of the participants had difficulty understanding some of the items. This was observed mostly in secondary level of education amongst Grade 8 students, to be specific. Although they were assisted in understanding the items, the researcher felt that lack of proper understanding of the items may have affected their responses.

For many people, talking about how they relate to their home environment experiences and how they relate to their parents is still viewed as shameful or seen as a weakness. This may have affected the manner in which participants responded to the questionnaire.

9.3 Recommendations

The study failed to find the role domicile plays in the development of identity and attachment. The researcher suggests that studies should find two groups where one is predominantly rural and another urban. This is because learners from both Boyne area (Makgoka and Marobathoa High School) and Ga-Matlala area (Motsemaria High School and Pax College) are predominantly from rural areas; and as a result urban, area may not have been well represented.

The researcher further recommends that studies should continue to explore the impact of family structure on the development of both identity and attachment. The researcher recommends that other researchers continue to use the Ochse' identity scale to check if some of the barriers still exist, and if they are deteriorating. The researcher also feels that it is important for researchers to continue exploring other factors which may be a barrier to the development of identity and attachment.

Furthermore, the researcher recommends that a longitudinal study be conducted where participants are seen prior going to a boarding and later while they have spend some time at the boarding school, to be able to establish whether the environment of being at a boarding school has or doesn't have an impact on the development of identity and attachment.

CHAPTER 10

10. REFERENCES

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APPENDIX A

PROJECT TITLE: Attachment and identity development among early and middle adolescent learners.

PROJECT LEADER: Mothapo M R

APPLICATION FOR HUMAN EXPERIMENTATION: PART II

INFORMATION FOR PARTICIPANTS

1. You are invited to participate in the following research project/experiment:

(it is compulsory for the researcher to complete this field before submission to the ethics committee)
2. Participation in the project is completely voluntary and you are free to withdraw from the project/experiment (without providing any reasons) at any time.
3. It is possible that you might not personally experience any advantages during the experiment/project, although the knowledge that may be accumulated through the project/experiment might prove advantageous to others.
4. You are encouraged to ask any questions that you might have in connection with this project/experiment at any stage. The project leader and her/his staff will gladly answer your question. They will also discuss the project/experiment in detail with you.
5. Your involvement in the project.

The nature of the specific project/experiment, the alleged risk-factors, factors that might possibly cause discomfort, the expected advantages and the known and/or likely side-effects should be explained under this item.

This section is to be drawn up by the researcher and must be submitted together with the application form.

(It is compulsory for the researcher to complete this field before submission to the ethics committee)

UNIVERSITY OF LIMPOPO ETHICS COMMITTEE

PROJECT TITLE: Attachment and identity development among early and middle adolescent learners.

PROJECT LEADER: Mothapo M R

CONSENT FORM

I, _____ hereby voluntarily consent to participate in the following project: *(it is compulsory for the researcher to complete this field before submission to the ethics committee)*

I realise that:

1. The study deals with _____ (eg. effect of certain medication on the human body) *(it is compulsory for the researcher to complete this field before submission to the ethics committee)*
2. The procedure or treatment envisaged may hold some risk for me that cannot be foreseen at this stage;
3. The Ethics Committee has approved that individuals may be approached to participate in the study.
4. The experimental protocol, ie. the extent, aims and methods of the research, has been explained to me;
5. The protocol sets out the risks that can be reasonably expected as well as possible discomfort for persons participating in the research, an explanation of the anticipated advantages for myself or others that are reasonably expected from the research and alternative procedures that may be to my advantage;
6. I will be informed of any new information that may become available during the research that may influence my willingness to continue my participation;
7. Access to the records that pertain to my participation in the study will be restricted to persons directly involved in the research;
8. Any questions that I may have regarding the research, or related matters, will be answered by the researchers;
9. If I have any questions about, or problems regarding the study, or experience any undesirable effects, I may contact a member of the research team;

10. Participation in this research is voluntary and I can withdraw my participation at any stage;
11. If any medical problem is identified at any stage during the research, or when I am vetted for participation, such condition will be discussed with me in confidence by a qualified person and/or I will be referred to my doctor;
12. I indemnify the University of Limpopo and all persons involved with the above project from any liability that may arise from my participation in the above project or that may be related to it, for whatever reasons, including negligence on the part of the mentioned persons.

SIGNATURE OF RESEARCHED PERSON

SIGNATURE OF WITNESS

SIGNATURE OF PERSON THAT INFORMED
THE RESEARCHED PERSON

SIGNATURE OF PARENT/GUARDIAN

Signed at _____ this ____ day of _____ 2007