

# CONTENTS

ABSTRACT.....	1
LIST OF TABLES .....	4
LIST OF APPENDIXES.....	5
CHAPTER ONE .....	6
INTRODUCTION AND RATIONALE .....	6
1.1.    Rationale .....	7
1.2.    Overview of the study .....	8
CHAPTER TWO .....	10
LITERATURE REVIEW .....	10
2.1.    Adolescence and Identity .....	10
2.2.    Self-attributes of Identity versus Collective Attributes of Identity .....	14
2.3.    Identity and University.....	14
2.4.    Marcia’s Ego Identity Statuses .....	16
2.5.    Identity Processing Style.....	19
2.6.    Self-esteem.....	25
2.7.    Global Self-esteem and Academic Self-esteem .....	27
2.8.    Self-esteem and Academic Achievement.....	28
2.9.    Self-esteem and Identity.....	29

2.10.	Gender.....	30
2.11.	Masculinity in South Africa.....	32
2.12.	Apartheid and Education in South Africa .....	32
CHAPTER THREE .....		36
METHODS .....		36
3.1.	Context of the Study .....	36
3.2.	Aims of the Study .....	36
3.3.	Research Design.....	37
3.4.	Participants.....	38
3.5.	Instruments.....	43
3.6.	Data Analysis.....	47
3.7.	Ethical Considerations .....	48
CHAPTER FOUR.....		50
RESULTS .....		50
4.1.	Overview of the Data Analysis .....	50
4.2.	Comparison of Males and Females on Identity Processing Style, Self-esteem and Academic .... Achievement .....	51
4.3.	Comparison between the Identity Processing Styles on Self-esteem and Academic ..... Achievement within the Male group.....	53

4.4.	Differences between the Identity Processing Styles on Self-esteem and Academic Achievement within the Female group .....	54
4.5.	Comparison between Identity Processing Styles on Self-esteem and Academic Achievement irrespective of gender.....	55
CHAPTER FIVE .....		57
DISCUSSION AND CONCLUSION.....		57
5.1.	Males and Females on Identity Processing Style, Self-esteem and Academic Achievement .	57
5.2.	Difference between Informational, Normative and Diffuse-Avoidant Individuals on Self-esteem and Academic Achievement within the Male group.....	59
5.3	Differences between Informational, Normative and Diffuse-Avoidant Adolescents on Self-esteem and Academic Achievement within the Female group .....	60
5.4	Differences between Informational, Normative and Diffuse-Avoidant Adolescents on Self-esteem and Academic Achievement irrespective of gender.....	60
5.5.	Practical Implications of the Results.....	62
5.6.	Limitations of the Study.....	64
5.7.	Suggestions for Future Research.....	65
5.8.	Conclusion .....	67
REFERENCES .....		68
APPENDIXES .....		77

## LIST OF TABLES

Table 1:	Sample Description	40
Table 2:	Participants' Parental Education	41
Table 3:	Participants' Parental Occupation	43
Table 4:	Total sample means of the three types of Identity Processing Styles	50
Table 5:	Comparative of Identity Processing Styles by gender	52
Table 6:	Self-esteem and June examination mark means by gender	53
Table 7:	Comparison between the identity processing styles on self-esteem and academic achievement within the male group	54
Table 8:	Differences in Female self-esteem and academic achievement by Orientation	55
Table 9:	Differences in Self-esteem and Academic Achievement by Orientation irrespective of gender	56

## **LIST OF APPENDIXES**

APPENDIX A:	Demographic Questionnaire	79
APPENDIX B:	ISI 3	81
APPENDIX C:	Rosenberg's Self-Esteem Scale	85
APPENDIX D:	Information Letter To Participant	87
APPENDIX E:	Participant Consent Letter	89
APPENDIX F:	Information Letter To Head Of School	90
APPENDIX G:	Ethics Clearance Certificate	91

# **CHAPTER ONE**

## **INTRODUCTION AND RATIONALE**

Research indicates that individual differences along personality dimensions may play a role in how well students negotiate the transition from high school to university (Adams, Ryan, Ketsetzis & Keating, 2000). For many adolescents, going to university can be a difficult transition. Given that many leave a familiar home environment, they often face challenges related to adjusting to the demands and expectations of academia.

A body of literature indicates that “adolescents often find themselves studying academic courses that do not match their skills, values, interests and personality” (Chae, 2001). In addition, research indicates that there is a growing trend for young adults to change fields of study (Crocetti, Rubini, Berzonsky & Meeus, 2008) indicating that young adults are finding it difficult to commit to career paths as a result of career indecision, limited knowledge of themselves, a lack of confidence regarding career exploration processes and limited information regarding occupations.

These could possibly be as a result of an identity that has not yet been developed or established. It is also possible that due to parental influences and peer pressure, adolescents choose certain career fields to please others and not themselves. A well-integrated identity structure provides individuals with a sense of direction and purpose, serving as a conceptual framework within which to deal with the demands of daily living (Berzonsky & Kuk, 2005).

Self-esteem can be referred to as self-worth or self-image and is the global dimension of self (Santrock, 2005). It is literally defined by how much value people place on themselves and is the evaluative component of self knowledge (Santrock, 2005). Latest self-esteem research

indicates that too many people have low self-esteem (Santrock, 2005). This at the university level could be linked to poor academic performance. The current study, thus intended to investigate whether there is an association between gender, identity processing orientations (styles), academic achievement and self-esteem.

### **1.1. Rationale**

There seems to be a growing trend both locally and internationally of a high failure rate of first year university students, which is a growing concern (Marshall, 2008). Research was conducted by the French education department in an attempt to reduce their first year university failure rate. The Minister for Higher Education and Research in France has reformed the “license”, a three year bachelor’s equivalent (Marshall, 2008) in an attempt to reduce the failure rate. “At present, about half the annual intake of students fails their first year” (Marshall, 2008).

Similar trends of high failure rates are also evident in South Africa. Woollacott (2003) reports failure rates amongst first year students at a well known South African university to be around 40 to 55 percent. Furthermore, a recent longitudinal study (Scott, 2008) found that only 38 percent of students graduated during the required time with 17 percent taking longer than five years to graduate and the remaining 45 percent never completing their studies or dropping out.

With recent studies such as Scott (2008), showing that low self-esteem is a problem today, it would be important to investigate this factor in relation to high failure rates in first year university psychology students. Given these disturbing statistics, it is crucial that

investigation be carried out to determine which factors are related to academic performance of first year psychology students.

## **1.2. Overview of the study**

This study consists of five chapters. The first chapter gives an introduction into the constructs of identity, gender, self-esteem and academic achievement. The chapter also highlights the relevance of the context within an identity forged in South Africa and emphasizes how the high first year failure rate is prominent both in South Africa and internationally. There are many challenges that are faced by first year psychology students in South Africa.

The second chapter reviews literature on identity development, Erikson's psychosocial stage theory, self attributes of identity versus collective attributes of identity, identity and university transition, Marcia's ego identity statuses, Berzonsky's identity processing styles, self-esteem (in relation to global, self versus collective, academic, identity and gender), masculinity in South Africa and education. The three theories that are further focused on, in this research, are that of Erikson, Marcia and Berzonsky.

The third chapter gives an outline of the aims of the study, research design, sampling, the four instruments used and how the data was analysed. The first instrument, the demographic questionnaire was used to obtain information from the participants, the second, the Identity Style Inventory (ISI-3) was used to measure identity processing style. The third instrument measured global self-esteem, namely the Rosenberg Self-Esteem Scale (SES). June examination results were used to measure academic achievement.



The fourth chapter gives an overview of the data analysis and interpretation of results. The last and fifth chapter dwells onto a discussion of the results followed by the practical implications and the limitations of the study. This chapter concludes with recommendations for future research which emerged as a result of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter reviews literature on identity, gender, self-esteem and academic achievement amongst first year university students. Identity development is focused on with emphasis placed on the theories of Erik Erikson, James Marcia and Michael Berzonsky.

#### **2.1. Adolescence and Identity**

Adolescence can be described as a period of heightened vulnerability as the significant changes that characterize adolescence in each domain of development may sabotage adolescent wellness (Peacock & Theron, 2007; Theron & Dalzell, 2006). The crisis that is faced involves balancing identity versus role confusion (Erikson, 1963). This crisis requires balancing the desire to attempt many possible selves and the need to find a single self (Sandhu & Tung, 2006). The adolescent needs to develop a positive identity, a sense of self, self-esteem and self-concept as a negative development can result in self-destructive behaviour (Theron & Dalzell, 2006).

First year university students often battle to make the jump from school to university and thus engage in destructive behaviour in an attempt to deal with the pressure which often sabotages the individual even further which can result in failure. Universities often have societies that students can join which assists students in finding common interest friends and should provide the student with more stability and confidence to pursue their studies with a clearer sense of identity.

Adolescence is one of the most challenging and complex phases of life in terms of experiencing it, describing it and studying it (Theron & Dalzell, 2006). It is characterized by gradual biological, physical, cognitive and psychosocial changes that affect the transition from childhood to adulthood (Theron & Dalzell, 2006). This stage is characterised by so many different changes, especially for those who are in their first year of university. The change in environmental structure, responsibility and workload is huge compared to that at school let alone the peer pressure of fitting in and finding new friends. It is certainly a difficult time of self negotiation.

“During this stage, adolescents engage in self-analysis and self-evaluation of their sexual, career and ideological identities, and these developmental tasks, essentially incorporates the conflicts related to negotiating between ego identities versus role confusion (Mdikana, Seabi, Ntshangase, and Sandlana, 2008). To become self governing, adolescents need to establish stances on issues such as ideology, relationships, life goals and values (Soenens, Berzonsky, Vansteenkiste, Beyers & Goossens, 2005). These tasks are extremely challenging and are often influenced by the viewpoints at home or of one’s group of friends.

Identities are constructed by young people in the context of other developmental demands and role transitions such as those related to future education, occupation and peer and intimate relationships (Berzonsky, Nurmi, Kinney & Tammi, 1999). Late adolescents also face the challenge of forming a clear and stable sense of self-identity (Berzonsky & Kuk, 2000). A well-integrated identity structure provides a sense of purpose and direction and serves as the basis for effectively coping with and adapting to the demands of everyday life (Erikson, 1968). The adolescent years are typically marked by the exploration of different roles and lifestyles with experience culminating into a crystallized sense of self (Chae, 2001).

Identity formation is essential to maturity. Identity is an essential construct when exploring career decision making processes (Mdikana et al., 2008). It pertains to how objects are defined and is a multi-faceted construct that comprises a number of interdependent dimensions including process, structure, function, content and context (Berzonsky, 1990). Social Identity theory suggests that part of our self concept comes from group memberships and the importance and meaning that we place on those memberships (Foels & Tomacho, 2005). For first year university students that would be their group of peers who most likely are also at university or at a similar point in their lives.

Theorists such as Erikson suggest that the central challenge during this stage (identity versus role confusion) is for the adolescent to come to terms with who s/he is and where one is going (Donald, Lazarus & Lolwana, 2002; Mdikana et al., 2008). According to Erikson (1968) identity serves as the frame of reference people use to interpret personal experiences and negotiate the purpose, meaning and direction of their lives. Identity exploration is seen as the work of identity formation.

Not until adolescence does the individual grow physiologically, mentally and socially to experience and pass through the crisis of identity (Erikson, 1968). Thus Erikson cites adolescence as a period of great importance in relation to identity formation. Erikson (1968) coupled crisis as normal and common to most people. Young people may temporarily over identify with cliques and crowds and are sometimes nasty to those that they consider as outsiders as a defense against the feelings of loss of identity (Erikson, 1968). This could lead to bullying even in the university setting. Erikson's theory is thus relationally and historically situated.

There is a conflict between ego identity and identity confusion which needs to be resolved before personality growth can continue (Erikson, 1968). Ego identity can be defined as an acceptance of self, a sense of where one is going in life, and an ability to make decisions (de Man et. al., 2008). Adolescents who have achieved ego identity generally have higher levels of self-esteem and tend to be more decisive, self-directed, good at problem solving and able to cope with changing environmental demands (de Man, et. al., 2008). These students usually do not battle to fit in and negotiate a new environment such as university. Self identity provides a subjective sense of inner wholeness and serves as an interpretive context within which questions such as the purpose and meaning of life are answered (Erikson, 1968).

It is useful to note that the theories of Sigmund Freud and Erik Erikson overlapped in terms of adolescence crisis and identity. Freud (1930a; 1965a) was one of the first to theorize on self definition. Freud conceptualized that one's sense of self was derived from parental introjects at the end of the Oedipal conflict during the creation of the superego (Schwartz, 2001). These introjects form the foundation of self-definition in childhood and also hold parental identifications that are not updated in adolescence (Schwartz, 2001). This then results in a crisis, similar to that described by Erikson (1968).

A process view of identity indicates that structural aspects of one's identity may undergo continual development across the lifespan as feedback may create the need for revision and accommodation (Berzonsky et. al., 1999). An identity crisis may occur and if adequate resolution occurs development ensues, however a defensive over reliance on assimilation could occur at the expense of reality testing (Berzonsky et. al., 1999). Identity is thus fluid.

## **2.2. Self-attributes of Identity versus Collective Attributes of Identity**

Theories of social identification speak of human actions on a continuum located from the individual-level to the group-level (Tajfel, 1981). There is a continuum of social and personal factors that affect behaviour. We cannot reduce behaviour to individual psychology without looking at intergroup dynamics. The Apartheid structure in South Africa was built on the notion of group differences and thus issues related to intergroup relations form the fabric of South African society. Individualistic approaches place the individual at the centre with individual thought and behaviour at the starting point from which all social activity is explainable (Foster & Louw-Potgieter, 1991). The socio-centered approach (group interaction), maintains that social processes transform individual thought and behaviour.

In South Africa, there seems to be a tendency towards a group or collective attribute to identity versus a western tendency of an individualistic approach. For example in the United States there is an individualistic culture that values independence, an autonomous self and cognitive elaboration (Berzonsky & Kuk, 2005) whilst in South Africa our culture is rich and diverse and traditionally rooted in the collective. Thus cultural factors would play a role in identity process and development.

## **2.3. Identity and University**

Entering university is a major life transition faced by many late adolescents which may be accompanied by considerable personal stress as students leave the security of a familiar home environment and attempt to deal with new demands and more rigorous academic challenges

(Berzonsky & Kuk, 2000). Leaving home is particularly difficult as further challenges of additional responsibility are added onto the stress of a new environment and new friends. Family support plays an important role. As contextual demands change and new situations are encountered, continued personal effectiveness will depend on the way in which the identity structure or self theory is maintained or revised (Berzonsky, 1990). Identity processes in particular play a relevant role (Berzonsky & Kuk, 2005).

According to Erikson's (1968) lifespan theory of psychosocial development, a university setting provides the opportunity for an institutionalized memorandum, a time when youth can actively explore life options and attempt to form a stable and coherent sense of personal identity. A coherent well-integrated identity structure provides individuals with a sense of direction and purpose and serves as a conceptual framework within which they can make decisions, solve problems and deal with the demands of everyday life (Berzonsky & Kuk, 2005). University can be viewed as a new start for students to make their own choices in relation to themselves academically and socially.

Identity development involves two processes, namely: engaging in exploration of oneself and the world and making a commitment with respect to an identity (Erikson, 1968). A lack of exploration leads to fewer learning experiences and less awareness of one's interest (Nauta & Kahn, 2007). Those with undefined identities have not yet formed clear or stable identities for themselves. "Exploration and commitment are the two significant processes involved in the formation of identity" (Mdikana et. al., 2008, p. 615). As different students explore and negotiate their identities at university differently Marcia's ego identity processes are useful in explaining the different types of identity styles one can achieve.

## **2.4. Marcia's Ego Identity Statuses**

Marcia, a pioneer in identity research elaborated on Erikson's identity theory and speculated that personal exploration in a variety of life domains culminates in a stable sense of self-definition over time (Nauta & Kahn, 2007). Researchers (Marcia, 1966; Marcia, Waterman, Matteson, Archer & Orlofsky, 1993) adopted a constructionist view of ego identity as a self structure with identity achievement being a dynamic process with socially instigated structural revisions and reconstructions. Identity status can be viewed as ways of resolving the identity crisis (Nauta & Kahn, 2007). It is based on the presence or absence of active self-exploration and firm identity commitments (Berzonsky & Kuk, 2000). Identity status is determined according to the crisis already worked through and the degree of commitment to choices. Thus individuals progress through a series of stages before reaching a stable identity.

Marcia (1966) proposed four identity statuses, namely, Identity Achievement; Moratorium; Foreclosure and Diffusion. Identity Achieved and Foreclosed individuals are viewed as committed whilst Moratorium and Diffused individuals are both viewed as non-committed individuals. Moratorium identity status involves an active exploration of ideological and occupational issues, while Achievement identity status is characterized by a commitment that has followed a process of critical analysis, introspection and questioning (Mdikana, et. al., 2008). "By definition students categorized as being achieved or foreclosed are more firmly committed and goal directed than students in the moratorium or diffusion statuses" (Berzonsky & Kuk, 2000, p. 82). Research indicates that self-exploring students classified in the Achieved and Moratorium statuses are generally more personally effective and adaptable than their Foreclosed or Diffused counterparts (Adams, Bennion, & Huh, 1989; Berzonsky, 1988; Clancy & Dollinger, 1993; Marcia et.al., 1993). They may or may not have passed through a crisis



period and may not be concerned about the fact that they have not arrived at definite decisions and commitments.

***Identity Achieved*** individuals have adopted their commitments on the basis of a thoughtful exploration process with identity-defining directions constructed on their own terms (Kroger, 2000) based on exploration of oneself and alternatives (Nauta & Kahn, 2007). The individual has experienced a crisis and has made firm but not rigid commitments to politics, job and religion (Sandhu & Tung, 2006).

***Foreclosed*** individuals are equally committed to identity-defining roles and values but no genuine exploration process was involved prior to commitment as these individuals have assumed an identity based on their identification of significant others (Nauta & Kahn, 2007) with the most common being parents (Kroger, 2000). Foreclosed individuals may have made commitments but may not have experienced a crisis (Sandhu & Tung, 2006).

***Moratorium*** and Diffused individuals are both non-committed in terms of key identity-defining roles and values, however, Moratorium individuals are very much in the process of exploring potential vocational roles and ideological values for fit (Kroger, 2000; Nauta & Kahn, 2007), whilst Diffused individuals are not (Kroger, 2000). Moratorium individuals are actively involved in a crisis and are struggling to clarify vague commitments to occupation, religion and politics (Sandhu & Tund, 2006).

***Diffused*** individuals lack an exploration of themselves and alternatives and have a lack of commitment to an identity (Nauta & Kahn, 2007; Sandhu & Tund, 2006). A Diffused person may not have experienced a crisis and may thus be deferring consideration of future decisions (Sandhu & Tund, 2006). “According to Erikson’s (1968) life-span theory of psychosocial

development, a university setting provides the opportunity for an institutionalized moratorium: A time when youth can actively explore life options and attempt to form a stable and coherent sense of personal identity” (Berzonsky & Kuk, 2005, p. 236).

In social relationships identity achievers have been found to be more extraverted and to adopt more adaptive interactional skills than individuals in the other statuses in particular identity diffusions (Berzonsky & Kuk, 2000). It has also been found that achievement has been positively related to career decision self-efficacy whilst moratorium was negatively related to it (Nauta & Kahn, 2007). Self-exploring students classified in the Achieved and Moratorium statuses are generally more personally effective and adaptable than their Foreclosed and Diffused counterparts (Berzonsky & Kuk, 2000). Foreclosed and especially Diffused students have been found to score high on dimensions indicative of maladjustment such as anxiety, neuroticism and depression (Berzonsky & Kuk, 2000).

Marcia (1966) further divided these into two styles of committed and two styles of non-committed late adolescents (Berzonsky & Kuk, 2000; Kroger, 2000). “Identity diffusion is characterized by the absence of exploration and commitment, while foreclosed identity status is characterized by the presence of commitment in the absence of exploration” (Mdikana, et al., 2008, p. 615). Marcia’s identity theory is much outcome based whilst Berzonsky’s Identity Processing Style Theory is process-based.

Whilst the statuses can be defined as modes of reaction to the task of identity formation they have also been utilised in the examination of developmental and cognitive questions concerning identity (Berzonsky & Kuk, 2005). In an attempt to conceptualise the social-cognitive processes underlying identity exploration processes Berzonsky (1988) proposed a

model that highlights differences in the processes individuals use to make decisions, resolve problems, and process self-relevant information.

## **2.5. Identity Processing Style**

As already mentioned, although Marcia's (1966) theory on identity statuses has typically been viewed as differential personality outcomes, process interpretations have also been advanced. Berzonsky (1988) proposes a social-cognitive view that highlights differences in the processes individuals use to make decisions, resolve problems, and process self-relevant information. "The social-cognitive perspective of Berzonsky (1990) postulates stylistic differences in how individuals process and deal with identity-relevant information and issues" (Crocetti, Rubini, Berzonsky & Meeus, 2008, p. 1-2).

A social-cognitive view proposes that social behaviour moves under the control of internal self regulating processes (Anderson & Huesmann, 2003). What is important is the cognitive evaluation of things taking place in the students' environment, how the student interprets these events, and how competent the student feels in responding in different ways (Anderson & Huesmann, 2003). "These cognitions provide a basis for stability of behaviour tendencies across a variety of situations, but coupled with frequent behavioural specificity. Internalised standards for behaviour are developed from information conveyed by a variety of sources of social influence, including conditioning and observational learning" (Anderson & Huesmann, 2003, p. 301).

Berzonsky's (1992) model shares this focus on the social-cognitive processes through which the environment conveys feedback to people with other social-cognitive theories such as self-efficacy theory. As experiences occur and reoccur, people form personal constructs that influence how environmental stimuli are attended to, processed and interpreted (Berzonsky, 1990). These concepts are formed unconsciously and automatically. Stable personal commitments may play an important role in promoting personal functioning and well being. Identity commitment is thus associated with identity processing style (Berzonsky, 1990).

Identity processing style is associated with individual differences in the strength, clarity and stability of self-conceptions (Berzonsky, 1988). This model of identity processing orientations operates on three levels (Berzonsky, 1990). Identity style which is the most general level pertains to the different types of strategies that individuals characteristically use or prefer to utilize across a diversity of environmental and social contexts (Berzonsky et. al, 1999). Social-cognitive strategies consist of utilizing systems of the basic cognitive and behavioural units (Berzonsky et. al, 1999). The most specific level consists of the actual cognitive and behavioural responses individuals perform as they negotiate identity conflicts and make decisions (Berzonsky et. al, 1999). Most research, however, has focused on Identity style, as will this research.

The three identity processing orientations are Informational, Normative, and Diffuse-Avoidant. Identity style refers to relatively stable differences in how students make decisions, solve personal problems, and process identity-relevant information (Berzonsky & Kuk, 2005). Differences in identity processing orientations play a role in how well adolescents negotiate the transition to a university context.

Information orientated individuals actively seek out, evaluate and utilize self-relevant information whilst being sure about their self constructions but are willing to test and revise aspects of their self-identity when confronted with discrepant feedback (Berzonsky & Kuk, 2000). They are thus sure of their own views and are willing to suspend judgement until they can process and evaluate relevant information (Berzonsky & Kuk, 2005). Such an identity orientation is positively associated with self-reflection, a personally-defined self identity, problem-focused coping efforts as it is a rational epistemic style, a high need for cognition, cognitive complexity, conscientiousness, experiential openness, and deliberate self exploration, independence of judgment, vigilant decision making and identity achievement (Berzonsky & Kuk, 2000; 2005; Berzonsky et. al, 1999). This orientation can be linked to individuals who are classified as Identity achieved or Moratorium according to Marcia's (1966) statuses.

Individuals with a Normative identity style deal with identity conflicts by internalizing and conforming to expectations and prescriptions of authority figures and significant others in a relatively automatic manner (Berzonsky & Kuk, 2005; 2000; Berzonsky et. al, 1999). Such individuals are agreeable and conscientious and possess stable, foreclosed concepts and have been found to be highly defensive and intolerant of ambiguity with a tendency to be closed to information that poses a threat to personal values and beliefs, possessing a strong need for structure, have a collective self-definition and cognitive closure and utilizing defence mechanisms that distort reality (Berzonsky & Kuk, 2005; Berzonsky et. al, 1999). Foreclosed individuals according to Marcia's statuses are found to rely on this approach to problem solving (Berzonsky & Kuk, 2000; Berzonsky et. al, 1999).

Diffuse-Avoidant individuals are hesitant to face up to and confront personal problems and decisions as if one procrastinates and delays long enough, situational incentives and

demands will dictate and control decision-making (Berzonsky & Kuk, 2000; 2005). “The context specific accommodations of Diffuse-Avoiders are postulated to be temporary acts of behavioural or even verbal conformity rather than long-term decisions and stable revisions in their identity structure” (Berzonsky et. al, 1999, p. 106). Such an identity orientation has been found to be positively associated with low levels of self-awareness, dysfunctional cognitive strategies, emotion focused coping, avoidant coping, self handicapping, other-directedness, maladaptive decisional strategies and identity diffusion whilst being negatively correlated with self-reflection, conscientiousness, and cognitive persistence (Berzonsky, 1994a; Berzonsky & Kuk, 2000; 2005). This identity style is positively associated with a Diffuse identity status of Marcia (Berzonsky, 1994a).

Furthermore, international research (Berzonsky & Kuk, 2000; 2005) indicates that Diffuse-Avoidant individuals tend to score lower on self-esteem in comparison to Information-orientated persons. In comparison to their Normative and Informational counterparts, Diffuse-Avoiders have been found to rely on intrapunitive defences that direct criticism inward and to score higher on measures of neuroticism and Machiavellian beliefs, but lower on measures of experiential openness, extraversion, agreeableness, and conscientiousness (Berzonsky et. al, 1999).

In previous research Boyd, Hunt, Kandell, and Lucas (2003) found that a Diffuse-Avoidant identity style was associated with negative expectations about academic success and performance, whilst the Informational and Normative styles were positively correlated with these dimensions.

Research (Berzonsky & Kuk, 2000; 2005) found that students who entered university with an Informational identity style were best prepared to function successfully in a university setting as they were uniquely positively correlated with establishing educational purpose, developing academic autonomy and developing mature inter-personal relationships. Students with a Diffuse-Avoidant style were at a relative disadvantage to these dimensions which implies that this style could be extremely detrimental for a youth's well-being since it influences key areas of personal success and peer socialization (Berzonsky et. al, 1999; Berzonsky & Kuk, 2000; 2005). Students with a Normative identity style also had a clear sense of academic direction but were significantly less tolerant and less academically and emotionally autonomous than their Informational counterparts (Berzonsky et. al, 1999).

Research (Berzonsky et al., 1999), also found an association between identity style and cognitive strategies in achievement contexts which suggests that developmental demands related to achievement contexts play an important role in adolescents' identity work (Berzonsky et. al, 1999).

Empirical support for these views is provided by status-comparison research with social-cognitive tasks (Berzonsky, 1990). People found to be classified as self-exploring Moratorium or Achievement have been found to display high levels of cognitive interactive complexity and information processing efficiency (Bennion & Adams, 1986). It has also been found that self-exploring individuals (Moratorium) have self-theories that are both distinctive and well integrated (Berzonsky, 1990).

Research on identity style revealed that the self-reported use of a Normative style is associated with identity Foreclosure and with a tendency to be closed to new information

relevant to areas of the self such as value and belief systems (Berzonsky, 1990) whilst the use of a Diffuse-Avoidant style has been found to correlate positively with Diffusion status scores, external control expectancies and deliberate anxiety reactions (Berzonsky, 1988) and negatively correlated with an openness to personal feelings (Berzonsky, 1990).

The relationship between identity status and an Information-oriented style has been found to be moderated by identity commitment (Berzonsky, 1990). In two studies Moratorium status and Information style relationships were not maintained until the effect of commitment was statistically controlled (Berzonsky, 1989b; Berzonsky, 1990). Thus identity commitments may restrict the use of an Information orientation (Berzonsky, 1990). Other research found that individuals who relied on Normative and Informational processing styles had stronger identity commitments and greater self clarity than their Diffuse-Avoidant counterparts (Berzonsky, 1990). Commitment thus influences personal functioning.

A growing body of research indicates that academic related problems are often experienced by Diffuse-Avoiders as compared to their Informational and Normative counterparts (Bennion & Adams, 1986; Berzonsky & Kuk, 2000; Berzonsky, 1990). Normative commitments appear more likely than Informational commitments to be emotionally grounded and may enhance premature cognitive commitments (Berzonsky & Kuk, 2005).

Although process may influence the structure of one's self-theory, structural developments may subsequently influence the process one's utilizing, thus identity style assessments focus on only one dimension of identity (Berzonsky, 1990). By late adolescence individuals should be capable of utilizing all three of the identity orientations depending on the situation, contextual demands, environmental consequences, personal involvement, culture and



social expectations (Berzonsky, 1990). Given this finding, the role of identity processing style in relation to self-esteem and academic achievement are discussed below.

## **2.6. Self-esteem**

Self-esteem can be referred to as self-worth or self-image and is the global dimension of self (Santrock, 2005). It is the judgments that we make about our own self-worth and the feelings associated with those judgments (Berk, 2003; Fleming & Courtney, 1984) as well as an attitude toward self and is based on an elaborated set of beliefs about oneself. It differs from self-concept in that it is general whilst self-esteem may be content specific. Two different individuals thus may have the same level of self-esteem but their underlying self-beliefs may be very different from each other (Rosenberg, 1979).

It ranks among the most important aspects of self-development as evaluations of our own competencies affect emotional experiences, future behaviour and long-term psychological adjustment (Berk, 2003). Each of these beliefs associates the self with a desirable or undesirable attribute with different degrees of salience or importance in any given situation (Berk, 2003). This variability in the importance of beliefs leads to differential weighting in determining the overall attitude (Berk, 2003; Fleming & Courtney, 1984).

Self-esteem has been found to be multi-faceted, with general self-esteem containing an umbrella of separate self-esteems such as academic competence, social competence, close friendship, romantic appeal, job competence and physical appearance (Harter, 1999; Hymel,

LeMare, Ditner, & Woody, 1999). For the current study, a global self-esteem will be investigated.

A person with high self-esteem is fundamentally satisfied with the type of person s/he is, yet s/he may acknowledge her/his faults while hoping to overcome them (Rosenberg, 1979). According to Berk (2003) and Hook, Watts and Cockcroft (2002), high self-esteem implies a realistic evaluation of the self's characteristics and competencies, coupled with an attitude of self-acceptance and self-respect. Students with high self-esteem are better liked by their peers and perform well academically (Harter, 1982).

Low self-esteem has been linked to negative characteristics such as anxiety, depression and increasing anti-social behaviour over time (DuBois, Bull, Sherman & Roberts, 1998 ; Fleming & Courtney, 1984). Students with healthy self-esteem are able to feel good about themselves, appreciate their own worth, and feel as if they can do well in university whilst students with low self-esteem may feel as if no one will like them or accept them or that they can't do well in anything.

People with high self-esteem tend to rely more on problem-focused strategies compared to individuals with low self-esteem and less on emotion-focused strategies. This is attributed to the fact that people with a high self-esteem generally are more confident and can overcome their problems. Self-esteem has been shown to be related to ego identity achievement (Erikson, 1968). Researchers have demonstrated that when compared to those with low self-esteem, individuals with a high self-esteem show more clearly defined self concepts and greater optimism towards meeting goals.

In another study, self-beliefs were found to be the best predictors of self-esteem among Caucasian adolescents whilst beliefs regarding parental relationships were better predictors of self-esteem among African American adolescents (Berk, 2003). Academic self-beliefs were not strong predictors of self-esteem in any gender by ethnicity groups with reading among males being the only exception (Berk, 2003). In relation to this research topic, these results are alarming as academic self-beliefs are important in promoting both academic achievement and preventing drop out at the first year level at university.

People with an Informational orientation style have been found to have the highest levels of self-esteem; those with a Normative style have the most stable self conceptions whilst those with a Diffuse-Avoidant style displayed the highest level of depression symptomology (Nurmi, 1991). Dysfunctional cognitive and attributional strategies such as expecting to fail in examinations were associated with low self-esteem, unstable self-conceptions, and depressive symptomology (Nurmi, 1991). Thus the manner in which individuals deal with identity issues is associated with their self-esteem.

It is important to note that a high self-esteem is not always adaptive and as such has been found to be associated with behaviours such as antisocial violence and aggression which in a university setting would be considered to be maladaptive.

## **2.7. Global Self-esteem and Academic Self-esteem**

Some psychologists proposed that self-esteem was a global self-concept which was determined by specific self-concepts (Rosenberg, 1965) however recently, Coopersmith (1967)

proposed that global self-esteem was based on four domains: significance, competence, virtue and power. Global self-esteem consists of factors such as people's affective states, their specific self-views, and the manner in which they frame these self-views (Rosenberg, 1965; Zimmerman, Copeland, Shope & Dielman, 1997 ). According to this hierarchical and multi-faceted model, self-esteem has different levels with the highest being global self-esteem and the lowest being evaluation of specific concrete behaviours in context (Rosenberg, 1965). Domain self-esteem (academic self-esteem) can be found somewhere in the middle (Rosenberg, 1965; Zimmerman et. al., 1997). Thus, *global self-esteem* refers to global trait self-esteem, and *domain self-esteem* refers to domain-specific trait self-esteem (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995; Woike & Baumgardner, 1993).

Many researchers (Rosenberg et. al., 1995; Zimmerman et. al., 1997) have shown that academic self-esteem moderate global self-esteem whilst a study by Lemay and Ashmore (2006) could not replicate the results. In a study to validate these claims, (Woike & Baumgardner, 1993) found that self-esteem in a certain domain (e.g. academic self-esteem) affects global self-esteem more strongly for people whose self-esteem is dependent on that domain. Thus for those who find academic achievement to be important, academic self-esteem will moderate global self-esteem more.

## **2.8. Self-esteem and Academic Achievement**

Learning requires the acquisition of new information and skills. A high self-esteem may boost the confidence of the student to try to acquire this new knowledge. Many studies have

found that self-esteem is positively correlated with academic performance (Davies & Brember, 1999). However recent research indicates that self-esteem and academic performance do not indicate that high self-esteem leads to good performance (Baumeister, Campbell, Krueger, & Vohs, 2003). High self-esteem is thus partly the result of good academic performance and efforts to boost self-esteem of students have not been shown to improve academic performance and may sometimes be counterproductive (Baumeister, et. al, 2003). In this research, the relationship between academic achievement and self-esteem was investigated.

## **2.9. Self-esteem and Identity**

Stipek and Seal (2001) state that students are motivated to learn when they feel capable, skilled, confident and when they have some choice and control over their learning. A study held at the University of Rochester showed that self-motivated students learn more, understand content better, and remember the content longer than other students (Stipek & Seal, 2001). In another study, it was found that self-motivated students felt poised and ready to learn and to discover knowledge actively rather than acquiring it passively (Stipek & Seal, 2001). Thus self-motivation is key to learning. Identity conflicts or issues in the environment and the completion of tasks or challenges successfully will allow adolescents to improve their self-esteem.

This links to Berzonsky and Kuk (2000) Informational processing style that students can adopt. Self-motivated learners may be seen as Informational processing individuals. Such an identity orientation is positively associated with self reflection, problem-focused coping efforts as it is a rational epistemic style, has a high need for cognition, cognitive complexity,

conscientiousness, experiential openness, vigilant decision making and identity achievement (Berzonsky & Kuk, 2000; 2005).

Recent research found that female students significantly outperformed their male counterparts in measured academic assessment criteria (Stipek & Seal, 2001). It was found that female participant's significantly higher levels of commitment made them view academic work as important and worthwhile (Stipek & Seal, 2001). This could be true for this study as well.

It has been found that self-esteem acts as a mediator between ego-identity and stress at university (de Man, et. al., 2008). Adolescents who achieved ego identity generally had higher levels of self-esteem with the self-esteem aspect of ego identity playing a role in relationships (de Man, et. al., 2008). High self-esteem thus could be a predictor of an achieved Identity status.

## **2.10. Gender**

Gender role identity is defined as the degree to which one associates closely with being either male or female (Foels & Tomacho, 2005). Men and women differ in how they define themselves in reference to their social world (Foels & Tomacho, 2005). Adolescence is a period of increased gender role differentiation among both boys and girls which is triggered by changes in physical appearance and role expectations (Buckley & Carter, 2005). During adolescence, gender roles are often organized and the range of allowable behaviours is restricted (Rosenberg, 1965) as adolescents are encouraged to adapt to gender-specific behaviours.

Gender difference research has been undertaken by several authors (Branch, 2001; Douvan & Adelson, 1966; Gilligan, 1988; Nodding 1983; Sandhu & Tung, 2006) with

conflicting results. Differences were found between boys and girls in terms of identity crisis resolution (Gilligan, 1988) with boys being lower in Diffusion statuses and higher in identity Achievement and Moratorium statuses. Recent research however tends to lean towards girls being higher than boys on identity Achievement and Moratorium and lower than boys in Diffusion (Sandhu & Tung, 2006).

Gender by identity style interactions have not been found in earlier research (Berzonsky et. al, 1999) however, gender differences in cognitive strategies have been reported (Nurmi, 1991). Gender may also interact with cross-cultural differences (Nurmi, 1991). Substantial differences have been found between the ethnicity by gender groups in the type of beliefs that best predicted self-esteem (Santrock, 2005).

In another study no significant gender differences along individual Informational and Normative style variables were found, however male subjects did score significantly higher than female subjects on the Diffuse scale (Berzonsky, 1990) which implies that in general boys appear to be lower on identity achievement status.

Recent research has found that for women non-traditional masculine characteristics are associated with a positive body image, life satisfaction and academic achievement (Buckley & Carter, 2005). In studies that focused on gender differences in collective self-esteem it was found that women may be higher than men in private collective self-esteem (Luhtanen & Crocker, 1992). Gender variation in terms of self-esteem is still a subject of controversy. It has been found that self-esteem acts as a mediator between ego-identity and stress at university (de Man, et. al., 2008).

### **2.11. Masculinity in South Africa**

The unflattering view of South African men is a stereotype (Morrell, 2001). Gender is more than a one-dimensional expression of power and is a historical analysis embodied in male vulnerabilities and weaknesses (Hunter, 2005). Whilst South Africa's political and economic systems have been changing since the end of Apartheid, so have there been changes in gender relations. Government policies have reduced the inequalities between men and women (Morrell, 2001). Masculinities in South Africa change according to the emerging material conditions, that is the dominant political and cultural forces that shape a society (Hunter, 2005). Culturally in South Africa masculinity is defined by the amount of power that one has (Miles, 1992). With women today being educated and occupying jobs of higher status, power has become an issue for men especially in South Africa. It is expected that with a changing climate in South Africa, there be a changing masculinity. It is expected that this change will be reflected in this research study.

### **2.12. Apartheid and Education in South Africa**

Education has undergone a transformative shift since the implementation of Outcomes Based Education (OBE). On April 26, 1994, South Africans of all races marked the end of Apartheid and the beginning of a transition to democracy. "The social, economic, and political system of Apartheid was self-consciously racist and unequal" (Fiske & Ladd, 2004, p. 18). Apartheid was a political regime that promoted the rights of White South Africans and discriminated against the marginalised groups of Blacks, Indians and Coloureds. No universally accepted definition of 'democracy' exists, especially with regard to the elements in a society



which are required for it, however democracy can be viewed as a government in which the people hold the ruling power either directly or through elected representatives, has a majority rule and practices the principles of equality of rights, opportunity, and treatment of the common people fairly (Webster's, 1983). “A society that makes provision for participation in its good of all its members on equal terms and which secures flexible readjustment of its institutions through interaction of the different forms of associated life is in so far democratic. Such a society must have a type of education which gives individuals a personal interest in social relationships and control, and the habits of mind which secures social changes without introducing disorder” (Dewey, 1916, p. 115). Dewey felt that reforms in early education could be a major lever of social change (Chomsky, 2003).

Many successes have been achieved in South Africa including more South Africans now receive education (Dollery, 2003) however, many hurdles lie ahead. Democracy is an ideal that South Africa has been attempting to adopt for the past 14 years. Due to the scars that the legacy of Apartheid left upon society, democracy has been difficult to implement.

“The central feature, that distinguishes South Africa from other countries in terms of educational provision, is the extent to which racially entrenched attitudes and the institutionalization of discriminatory practices led to extreme disparities in the delivery of education, a reflection of the fragmentation and inequality that characterized society as a whole” (Engelbrecht, 2006, p. 253). Strategies have been developed to implement democracy within education (ensuring that every South African is able to read, write, count and think, equal access to education, infusing the classroom with a culture of Human Rights and Anti-Racism in schools to mention a few), have been of moderate success (Jansen, 2001; Loebenstein, 2005; Samoff,

1996; Sayed, 2000; 2002). Education has had to compete for resources and attention with other reform priorities such as: the social agenda, political participation and economic development (Fiske & Ladd, 2004). Disparities still exist between former disadvantaged schools and former white advantaged schools. “Thus, developing the relevant infrastructure and capacity to support the transformation of education, has become a primary challenge” (Loebenstein, 2005, p. 255). The consequences of ‘Bantu Education’ will take decades to repair. Furthermore, with both the changes of the structure and process of the educational system teachers have had a lot of change to implement in the classroom.

Gender inequity has long been a problem both in South Africa and Education. In the sphere of gender equity, although much has changed in South Africa since 1994, much has remained the same. The immediate post-Apartheid period saw both the assertion of women as equal partners in all aspects of daily life and, on the one hand, increasing social and familial violence against women and girls as well as, on the other, continuing high levels of unemployment and poverty amongst women (Unterhalter, 2004, in Chisholm & September, 2005). We need to re-envision the gender debates in the education sector in South Africa in the current context.

Inclusive education is an educational policy that has been implemented world-wide. Inclusive education requires that teachers accommodate the diverse needs of the students in their classroom. The focus is on adaptation of and support systems that are available in the classroom (Department of Education, 2000). It acknowledges that all learners can learn and need support; structures, systems and learning methods must meet the needs of all learners and differences such as age, ethnicity, gender, language, class, HIV status and disability have to be respected as

well as similarities (Killen, 2007; Department of Education, 2000). It is a policy that is in line with the Constitution and reached an advanced stage at the end of 1997 and again in 2001 with the completion of the White Paper 6. The Salamanca Statement is a set of principles, policies and practices that assert that inclusion is a right which is universal and thus the creation of inclusive schools is the creation of an inclusive society (Engelbrecht et. al., 1999). Inclusion in South Africa adheres to this.

## **CHAPTER THREE**

### **METHODS**

#### **3.1. Context of the Study**

The current study was conducted at a well known South African university in the department of Psychology. It is situated in the city of Johannesburg in the province of Gauteng. This study forms part of a longitudinal study which investigates factors associated with high attrition and throughput rates of first year students across all schools within the Faculty of Humanities.

#### **3.2. Aims of the Study**

The primary aim of this research study was to compare the identity processing style of males and females in relation to academic performance and self-esteem.

The specific research aims were to determine whether:

1. there are significant differences between males and females on identity processing styles, self-esteem and academic achievement
2. there are significant differences between Informational, Normative and Diffuse-Avoidant individuals on self-esteem and academic achievement within the male group
3. there are significant differences between Informational, Normative and Diffuse-Avoidant adolescents on self-esteem and academic achievement within the female group

4. there are significant differences between Informational, Normative and Diffuse-Avoidant adolescents on self-esteem and academic achievement between genders

Based on the first aim of the study it was envisaged that there would be a significant difference between males and females on identity processing style, self-esteem and academic achievement. It was expected that more females would have reached identity achievement than males. Furthermore, it was also expected that female self-esteem would be lower than that of their male counterparts and an identity achievement status being linked to academic achievement. In line with the second aim, it was expected that those in the identity achievement styles would have a higher self-esteem within the male group and likewise within the female group in the third aim. Lastly, a significant difference was expected regardless of gender in respect to the three identity styles. A significant difference was also expected in relation to self-esteem and academic achievement. It was expected that those who are identity Achieved will have a higher self-esteem and academic achievement as compared to their Diffused and Moratorium counterparts regardless of gender.

### **3.3. Research Design**

The current study adopted non-experimental ex post facto designs. An ex post facto design begins with a given effect and seeks the experimental factor that brought it about (Devlin, 2006; Huck, 2004; Leedy, 1974). “The obvious weakness of such an “experiment” is that we have no control over the situations that have already occurred and we can never be sure of how many other circumstances might have been involved” (Leedy, 1974, p. 155). The design was ex

post factor in nature as the variables being measured being identity status, self-esteem and academic achievement had already been established in the participants and furthermore, the researcher was only interested in the differences between these variables and not to measure them.

### **3.4. Participants**

Participants comprised 428 first year psychology students. A non-probability purposive sampling approach was utilized to select students. With purposive sampling the researcher starts with a large group of potential participants that must meet certain criteria established by the researcher (Huck, 2004). In this research study, participants met the criteria of being students in the first year psychology class.

On the first day, out of 900 possible participants, 428 participants were obtained who completed the Demographic Questionnaire and the Identity Style Inventory (ISI-3). On the second day, 116 participants completed the Rosenberg Self-Esteem Scale (SES). This discrepancy between data collected on the two days can be accounted by there being a test the following day with many students missing class on the second day that data was collected to study. Table 1 shows the sample description as obtained from the Demographic Questionnaire.

As presented in Table 1 below, the average age of the participants was 18.93 years with the age range extending from 17 years of age to 24. Race distribution was utilized purely as a research tool to describe the sample and yielded 59 percent (n=253) African participants, 7 percent (n=31) Indian, 7 percent (n=30) Coloured, 2 percent (n=7) Asian and 25 percent (n=107)

Caucasian. For the majority of participants (58 percent) English was either a second or third language and this is important given that lectures are mainly conducted in English at this university. The majority of the participants (53 percent, n=229) attended government schools with (33 percent n=139) of the sample attending Independent schools. The gender distribution was unequal with more females (72 percent, n=310) than males (28 percent, n=118) participating in this study.

**Table 1: Sample Description**

<b>Mean</b>	<b>Age</b>	<b>Race</b>	<b>Home</b>	<b>School</b>	<b>Gender</b>
<b>Age</b>	<b>Range</b>	<b>Distribution</b>	<b>Language</b>	<b>Type</b>	<b>Distribution</b>
18.93	17-24	African: 253 (59%)	English:183 (42%)	Government: 229 (53%)	Male: 118(28%)
		Indian: 31(7%)	Non-English:245 (58%)	Independent: 139(33%)	Female: 310(72%)
		Coloured: 30 (7%)		Former Model C:43(11%)	
		Asian: 7 (2%)		Other: 17 (3%)	
		Caucasian: 107 (25%)			



In terms of parental education, 32.4 percent of the participants' fathers had attained a matriculation or below as their highest qualification. Thirty two point six percent of the mothers has obtained a matric or below. Of those participants who have guardians, 17.7 percent has obtained a matric. There were 18.2 percent of learners who indicated 'not applicable' under parental education for their fathers, 11.7 percent for their mothers, and 32.3 percent for their guardians. It appears as if the question may have been ambiguous. Some participants may not know their parents or their parents may be deceased and as a result they could not provide such information. Table 2 below presents parental education.

**Table 2: Participants' Parental Education**

	<b>Father</b>		<b>Mother</b>		<b>Guardian</b>	
	<b>n.</b>	<b>%</b>	<b>n.</b>	<b>%</b>	<b>n.</b>	<b>%</b>
<b>Below Matric</b>	61	14.2	53	12.3	5	5.3
<b>Matric</b>	78	18.2	87	20.3	12	12.4
<b>Diploma</b>	75	17.3	90	21.0	15	16.1
<b>Degree</b>	79	18.4	101	23.8	22	23.2
<b>Postgraduate</b>	59	13.7	47	10.9	10	10.7
<b>Degree</b>						
<b>Not Applicable</b>	78	18.2	50	11.7	30	32.3

The Registrar General's Classification of Occupation scale was utilized to classify the participants' parental occupation. Seventy point three % of fathers are in positions of managerial or above whilst 81.10 % of mothers are in positions of managerial or above and 78.13 % of guardians are in managerial positions or above. Despite a recession and shortage of jobs in South Africa these parents are still occupying higher level jobs. Table 3 below presents parental occupation. Six point five % of fathers are skilled nonmanual, 2.3% of mothers and 6.9% of guardians (e.g: self employed, entrepreneur), 8.5 % of fathers are skilled manual, 4.2 % of mothers and 10.3% of guardians (e.g: electrician, plumber), and 14.7% of fathers, 12.4% of mothers and 4.6% of guardians are unskilled manual (e.g: foreman, domestic worker).

**Table 3: Participants' Parental Occupation**

	<b>Father</b>		<b>Mother</b>		<b>Guardian</b>	
	<b>n.</b>	<b>%</b>	<b>n.</b>	<b>%</b>	<b>n.</b>	<b>%</b>
<b>Professional</b>	111	25.9	75	17.5	29	33.3
<b>Managerial</b>	190	44.4	272	63.6	39	44.83
<b>Skilled non-manual</b>	28	6.5	10	2.3	6	6.9
<b>Skilled manual</b>	36	8.5	18	4.2	9	10.3
<b>Unskilled manual</b>	63	14.7	53	12.4	4	4.6

### 3.5. Instruments

As previously mentioned, a demographic questionnaire, the ISI(3), SES and June examination marks were utilized to obtain the data. These instruments are discussed in detail below.

### 3.5.1 Procedure

The researcher approached the head of the School of Psychology with a letter requesting permission for the research to be conducted in the school. Upon the granting of this request, the researcher approached the course-coordinator of the first year psychology program to request permission to conduct research. Subsequently upon permission being granted, the researcher approached all first year psychology lecturers, obtained consent and arranged times to meet the students.

Data was collected over two days in May 2009. Students were addressed by the researcher during their lecture times. The researcher explained the nature of the data and that participation was voluntary. It was explained that besides the completion of a questionnaire and two scales, June examination marks would need to be accessed. The importance of the research was reiterated. Students that wished to participate completed the questionnaire and scales, signed a consent form allowing the researcher access to their June examination marks and were given the contact details of the Counseling and Career Development Unit at the university should they require career counseling.

### 3.5.2 Demographic Questionnaire

The demographic questionnaire covered aspects related to name, age, gender, race, ethnicity, home language, school type (matriculation) and year of study. (Refer to Appendix A for further details).

### 3.5.3 Identity Style Inventory (ISI-3)

The current study utilised the revised Identity Style Inventory (ISI-3) (Berzonsky, 1990), which assesses identity orientation. This test has not as yet been utilised in South Africa. The ISI assesses the extent to which students utilise identity processing styles (Crocetti et. al., 2008). This inventory consists of 40 items scored on a scale ranging from 1 (not like me at all) to 5 (very much like me). It contains a ten-item Diffuse-Avoidant style scale, an eleven-item informational-style scale, a nine-item Normative-style scale and a ten-item general scale (Berzonsky & Kuk, 2000). The ISI-3 was originally developed for administration to university students and was of particular relevance to this study. Berzonsky (1990) reports Cronbach Alphas of .64 for Informational style, .58 for Normative style, .75 for Diffuse-Avoidant style. Alphas will be run in this study as this instrument has not as yet been used in South Africa. Test-retest reliability after a two-week interval were 7.8 for Informational, 7.8 for Normative, 3.8 for Diffuse-Avoidant and 9.8 for Commitment (Berzonsky, 1990). (Refer to Appendix B for more details).

### 3.5.4 Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale (SES) is a 10 item self-report measure of global self-esteem (Rosenberg, 1965). It consists of 10 statements related to overall feelings of self-worth or self-acceptance (Rosenberg, 1965). The items are answered on a four-point scale ranging from strongly agree to strongly disagree. It was originally developed to assess self-esteem among adolescents (Rosenberg, 1965). It measures both Global and Uni-dimensional self-esteem. The SES can be completed in less than 5 minutes.

Scores range from 10 to 40, with higher scores indicating higher self-esteem. The scale has been validated for use with both male and female adolescents (Rosenberg, 1965). The scale generally has a high reliability: test-retest correlations are typically in the range of .82 to .88, and Cronbach alpha for various samples are in the range of .77 to .88 (Rosenberg, 1965). It has been utilized in South Africa (Baranik, Meade, Lakey, Lance, Hu, Hua & Michalos, 2008). (Refer to Appendix C).

### 3.5.5 June Examination Results

June examination marks were also required and as such consent forms were attached to the demographic questionnaire (Refer to Appendix E). Academic achievement was measured via mid-year marks of all psychology courses that first year students take.

### 3.6. Data Analysis

Given that the assumptions of parametric tests i.e. independence, randomness, normality, and homogeneity of variance (Devlin, 2006; Huck, 2004) were satisfied, a one-way ANOVA and t-tests were used.

1. Several independent t-tests were carried out to compare males and females on identity processing style, self-esteem, and academic achievement.
2. To determine whether there was a statistically significant difference between the three identity processing styles within the male group on self-esteem and academic achievement Univariate One-Way Analysis of Variance (ANOVAs) were conducted.
3. To determine whether there was a statistically significant difference between the three identity processing styles within the female group on self-esteem and academic achievement ANOVAs were conducted.
4. To test whether there was a significant difference between Informational, Normative and Diffuse-Avoidant adolescents on self-esteem and academic achievement ANOVAs were conducted.

The most frequently used statistical technique used for adjusting the alpha level is called the Bonferroni technique. It is most frequently used to deal with a Type 1 error (this is when true null hypothesis are rejected) (Huck, 2004). In this research it was utilized to reduce a Type 1 error risk. It was also of interest to see if this alpha value was the same as that found in previous studies overseas.

### **3.7. Ethical Considerations**

Permission to conduct the research was obtained from the relevant head of the School of Psychology, course coordinator, lecturers as well as the students (Refer to Appendices D, E and F). A letter was sent requesting permission to conduct a research project on the students. This letter stated the nature and the purpose of the study, as well as important ethical considerations. In this letter it was emphasized that the school was under no obligation to participate in the study, and was entitled to withdraw at any time. It was highlighted that the confidentiality of the School of Psychology, university and the students that participated in the study, would be held with the highest regard.

The potential participants were provided with an information sheet. This information sheet provided the potential participants with an introduction to the researcher, as well as the nature and the purpose of the research. It also stated what was required of the participants and how long it would take to fulfill these requirements. It was clearly stated that June examination marks would be required. The information sheet also informed the potential participants that participation in this research project was voluntary, and that their affiliation to their school would in no way be affected by their participation in this study. There was also an emphasis on the confidentiality of each participant. Attached to this information sheet was a letter of consent that anyone wishing to participate in the study, was required to sign and date.

Students who participated in the study received a briefing, during an arranged time, in order to clarify the ethical considerations and answer any questions that any of the participants may have had. This time was arranged in accordance with the head of the School of Psychology



and the relevant lecturers. During this time, participants were also informed of the arranged method for returning their questionnaires. A box was placed at the front of the lecture hall in which students could place completed questionnaires when leaving the venue. (Refer to Appendix G for the approved ethic clearance certificate).

## CHAPTER FOUR

### RESULTS

#### 4.1. Overview of the Data Analysis

Both descriptive and inferential statistics were utilized to analyze the data collected. Statistical Analysis System (SAS) version 9 was utilized to conduct the analyses. As previously mentioned, the average age of the participants was 18.93 years with the age range extending from 17 years of age to 24. As already mentioned, the gender distribution was unequal with more females (72 percent) than males (28 percent) participating in this study. As shown below in Table 4, 134 (31.3%) participants were found to be Informational, 141 (32.9%) Normative and 153 (35.8%) Diffuse-Avoidant. Thus the sample majority were Diffuse-Avoidant.

**Table 4: Total sample means of the three types of Identity Processing Styles**

<b>Variables</b>	<b>N (%)</b>	<b>Mean</b>	<b>SD</b>
<b>Informational</b>	134 (31.3)	38.07	5.25
<b>Normative</b>	141 (32.9)	30.67	5.44
<b>Diffuse- Avoidant</b>	153 (35.8)	26.24	5.71

*Inferential* tests employed were the t-test and ANOVA. The results are presented in four sections in line with the research aims. As previously mentioned, the first aim of the study was to determine if there were significant differences between males and females on identity processing style, self-esteem and academic achievement. The results are presented in section 4.2. The second aim was to determine if there were significant differences between Informational, Normative and Diffuse-Avoidant individuals on self-esteem and academic achievement within the male group. These results are presented in section 4.3. The third aim was to determine if there were significant differences between Informational, Normative and Diffuse-Avoidant adolescents on self-esteem and academic achievement within the female group. These results are presented in section 4.4. Whilst the findings of the fourth aim (to determine if there were significant differences between Informational, Normative and Diffuse-Avoidant adolescents on self-esteem and academic achievement irrespective of gender) is presented in section 4.5.

#### **4.2. Comparison of Males and Females on Identity Processing Style, Self-esteem and Academic Achievement**

The results for identity processing style, self-esteem and academic achievement is presented separately. As can be seen in Table 5, a statistically significant difference [ $t(1, 427) = -3.77$ ;  $p < .05$ ] was found between the male and female groups on the Normative identity processing style in favour of the females. There was however no significant difference between

the gender groups on Informational and Diffuse-Avoidant styles. It is of important to note that there were more female participants than male participants.

**Table 5: Comparative of Identity Processing Styles by gender**

	<b>Male</b>			<b>Female</b>			
	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>t</b>
<b>Informational</b>	39	37.82	5.75	95	38.19	5.06	-0.60
<b>Normative</b>	29	28.97	5.95	112	31.32	5.10	3.77*
<b>Diffuse-Avoidant</b>	48	26.40	6.05	104	26.18	5.60	0.35

\*Significant at  $p < .05$

As shown in Table 6 below, no significant difference between males and females on self-esteem was found. Similarly, no significant difference [ $t(1, 427) = -1.33$ ;  $p > .05$ ] was found between males and females on academic achievement.

**Table 6: Self-esteem and June examination mark means by gender**

	<u>Self-esteem</u>				<u>June examination</u>			
	N	Mean	SD	t	N	Mean	SD	t
<b>Males</b>	33	32.12	4.4		116	51.03	14.04	
<b>Females</b>	82	31.84	5.0	0.29	312	53.05	13.44	-1.33

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\*Significant at  $p < .05$

#### **4.3. Comparison between the Identity Processing Styles on Self-esteem and Academic Achievement within the Male group**

An ANOVA was utilized to establish any differences between the three identity processing styles on self-esteem and academic achievement within the male group. No significant difference ( $F=0.44$ ,  $df: 2$ ,  $p > 0.64$ ) was found between the three different orientations on self-esteem and academic achievement in the male group as shown in Table 7. The Informational group performed better in terms of academic achievement whilst the Normative group underperformed in academic achievement in comparison to their Informational and Diffuse- Avoidant counterparts. It is interesting to note that the Diffuse-Avoidant group had the lowest self-esteem score but a higher June examination result than the Normative group.

**Table 7: Comparison between the identity processing styles on self-esteem and academic achievement within the male group**

	<b>Self-Esteem</b>					<b>June Marks</b>				
	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>DF</b>	<b>F</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>DF</b>	<b>F</b>
<b>Informational</b>	11	32.54	4.45	2	0.44	134	54.34	14.47	2	2.50
<b>Normative</b>	8	33.00	4.70	2		141	46.48	14.57	2	
<b>Diffuse-Avoidant</b>	14	31.28	4.35	2		153	50.85	13.18	2	

\*Significant at  $p < .05$

#### **4.4. Differences between the Identity Processing Styles on Self-esteem and Academic Achievement within the Female group**

To establish if there were any differences between the three identity processing styles on self-esteem and academic achievement variables in the female group an ANOVA was utilized. No significant differences were noted in Table 8 ( $F=1.08$ ,  $df:2$   $p > 0.34$ ). However it is important to note that the Informational female group scored the highest in academic achievement but had the lowest self-esteem score of the three identity styles and whilst the Diffuse Avoidant group had the lowest self-esteem score the group did score the higher than the Normative group in academic achievement. This is consistent with the results found above in the male group.

**Table 8: Differences in female self-esteem and academic achievement by identity style**

	<b>Self-Esteem</b>					<b>Academic Achievement</b>				
	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>DF</b>	<b>F</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>DF</b>	<b>F</b>
<b>Informational</b>	21	30.80	6.16	2		92	55.34	16.14	2	
<b>Normative</b>	33	32.18	4.88	2	1.08	112	51.85	12.71	2	1.86
<b>Diffuse</b>	25	32.08	4.71	2		104	52.55	11.29	2	
<b>Avoidant</b>										

\*Significant at  $p < .05$

#### **4.5. Comparison between Identity Processing Styles on Self-esteem and Academic Achievement irrespective of gender**

An ANOVA was utilized to analyse the variables. As shown in Table 9 below, a significant difference was found between the Informational and Normative groups in favour of the Informational group with regards to academic achievement ( $F=3.46$ ,  $df= 2$ ,  $p < 0.05$ ). This was despite a lower self-esteem score. Thus the Informational group outperformed the Normative group in terms of academic achievement. The Normative group which displayed the highest self-esteem score performed the lowest in terms of academic achievement whilst the Diffuse-Avoidant group had low examination results and a low self-esteem score. Thus the Informational group performed the best in terms of academic achievement. No significant results for self-esteem were found.

**Table 9: Differences in self-esteem and Academic Achievement by processing styles  
irrespective of gender**

	<u>Self-Esteem</u>					<u>Academic Achievement</u>				
	N	Mean	SD	DF	F	N	Mean	SD	DF	F
<b>Informational</b>	32	31.40	5.62	2		130	55.05	15.62	2	
<b>Normative</b>	41	32.34	4.81	2	0.51	139	50.81	13.21	2	3.46 *
<b>Diffuse Avoidant</b>	39	31.79	4.54	2		151	52.02	11.89	2	

\*Significant at  $p < .05$



## **CHAPTER FIVE**

### **DISCUSSION AND CONCLUSION**

As the results were given in sections by aims, as such the discussion of the results will be structured in this manner. Thus sections 5.1, 5.2, 5.3 and 5.4 will discuss the results found in chapter four in detail. Subsequently, sections 5.5, 5.6, and 5.7 will discuss the practical implications of the results, the limitations of the study and suggestions for future research consecutively. Thereafter, the conclusion will be presented in section 5.8.

#### **5.1. Males and Females on Identity Processing Style, Self-esteem and Academic Achievement**

As indicated earlier, the first aim of the study was to determine if there was a significant difference between males and females on identity processing style, self-esteem and academic achievement.

##### **5.1.1 Identity Processing Style**

It was expected that there would be a difference between males and females on identity processing styles. As previously mentioned, no significant difference was found. Thus these results are not consistent with international research which indicated differences between boys

and girls (Berzonsky & Kuk, 2000) with boys being lower in diffusion statuses and higher in identity Achievement and Moratorium statuses. Furthermore, other research indicated that girls were higher than boys on identity Achievement and Moratorium and lower than boys in Diffusion (Berzonsky, 1990; Sandhu & Tung, 2006). Although the results in this study do not show a significant difference, girls were found to be higher on Informational and Normative statuses and lower on the Diffuse-Avoidant status. This would mean that had the sample been larger for both the gender groups a significant difference could have been found.

#### 5.1.2 Self-esteem

Gender variation in terms of self-esteem is still a subject of controversy. No significant difference was found between males and females on self-esteem in this study. In studies that focused on gender differences in collective self-esteem it was found that adolescent females were higher than adolescent boys in terms of self-esteem (Luhtanen & Crocker, 1992). In this study, despite there being no significant difference in self-esteem, male participants were found to have a slightly higher self-esteem than their female counterparts. Culturally in South Africa masculinity is often defined by the amount of power a man has (Miles, 1992). Neumann, Leffingwell, Wagner, Mignogna & Mignogna(2009) found that male university students tended to have more self-serving attitudes and displayed higher self-esteem and were particularly resistant to information that was otherwise. Thus the results found in this research are consistent with this study (Neumann et al., 2009), and could be accounted for by males reporting higher a self-esteem than that which they encompass for cultural reasons.

### 5.1.3 Academic Achievement

No significant difference was found between males and females in terms of academic achievement. Although not expected, the present results are consistent with previous findings, (Chee, Pino & Smith, 2005), which revealed no gender differences in academic achievement amongst university students.

In the current study, female participants did perform slightly better than their males counterparts. This could have been accounted for by there being more female participants than male participants in the study. Nonetheless, recent research found that female students significantly outperformed their male counterparts in measured academic assessment criteria (Baumeister, Campbell, Krueger, & Vohs, 2003). It was found that female participants' significantly higher levels of commitment made them view academic work as important and worthwhile (Baumeister et al., 2003). Further research needs to be done with a focus on the gendered nature through which students' social contexts are linked to students' attitudes and behaviours concerning their academic life (Chee et al., 2005).

## **5.2. Difference between Informational, Normative and Diffuse-Avoidant Individuals on Self-esteem and Academic Achievement within the Male group**

No significant differences were found between the three different processing styles with regards to self-esteem and academic achievement in the male group. Previous studies (Berzonsky & Kuk, 2000; 2005) found that the Informational group outperformed the other groups

academically and had the highest self-esteem. Thus this research study's finding is contrary to that of previous research. As a global measure of self-esteem was administered in the present study, a specific measure of self-esteem related to academic achievement could be utilized in future studies.

### **5.3 Differences between Informational, Normative and Diffuse-Avoidant Adolescents on Self-esteem and Academic Achievement within the Female group**

As previously mentioned, no significant differences were noted in the female group. Self-esteem was found to be lowest in the Informational group which is contrary to what was expected. Previous research (de Man, et. al., 2008) found that Informational style individuals generally had a high self-esteem. Thus the results of this study are contrary to those of previous studies. These results are consistent with those found in the male group. Thus South African females appear to differ from their international counterparts.

### **5.4 Differences between Informational, Normative and Diffuse-Avoidant Adolescents on Self-esteem and Academic Achievement irrespective of gender**

A significant difference was found between the Informational and Normative groups on academic achievement. The Informational group's academic achievement was superior to that of

the Normative classmates despite having the lowest self-esteem score. High academic performance is consistent with past research (Berzonsky et. al, 1999; Berzonsky & Kuk, 2000; 2005) however, a low self-esteem score was unexpected. Past research indicated that self-esteem and academic performance were positively correlated however, recent research indicates that self-esteem and academic performance do not indicate that high self-esteem leads to good performance (Baumeister et al., 2003). This current study supports this hypothesis that high self-esteem and academic performance are not correlated.

No significant difference was found between the identity processing styles and self-esteem. Many studies have found that self-esteem is positively correlated with academic performance (Berzonsky et. al, 1999; Davies & Brember, 1999). Previous research found that students with an Informational processing style were found to have the highest levels of self-esteem, those with a Normative style the most stable self conceptions, whilst those with a Diffuse-Avoidant style the highest level of depression symptomology (Nurmi1991). In this research it was found that the Normative group which displayed the highest self-esteem score had the lowest June examination results. A high self-esteem score was expected as a Normative orientated individual tends to be agreeable and conscientious and possesses stable foreclosed concepts (Berzonsky, 2005; Berzonsky et. al, 1999). Thus low June examination results were unexpected. This was contrary to the majority past research which indicated that Normative individuals appeared more likely than their Informational counterparts to be emotionally grounded and possess enhanced premature cognitive commitments (Berzonsky, 1990). However recent research indicates that self-esteem and academic performance do not indicate that high self-esteem leads to good performance (Baumeister et al. , 2003).

The Diffuse-Avoidant group had low June examination results and a low self-esteem score. However, both this group's June examination and self-esteem scores were not the lowest of the three identity processing styles. The June examination results of the Diffuse-Avoidant group was unexpected as past research indicated that because of the nature of these individuals being hesitant to face up to and confront personal problems and decisions and poor cognitive persistence (Berzonsky & Kuk, 2000; 2005) that this group would have had the lowest June examination results. Furthermore, international research (Berzonsky & Kuk, 2000; 2005) indicated that Diffuse-Avoidant individuals tend to score lower on self-esteem in comparison to Informational persons which is contradictory to the findings of this study. Over confidence in ones abilities could have led to this score. This indicates that self-esteem is not a predictor for academic achievement.

## **5.5. Practical Implications of the Results**

The present study attempted to investigate the differences in males and females' identity processing style in relation to academic achievement and self-esteem. Specific research aims attempted to: investigate if there were significant differences between males and females on identity processing style, self-esteem and academic achievement; determine if there were significant differences between Informational, Normative and Diffuse-Avoidant individuals on self-esteem and academic achievement within the male group; determine if there were significant differences between Informational, Normative and Diffuse-Avoidant adolescents on self-esteem and academic achievement within the female group and lastly, to determine if,

irrespective of gender, were there significant differences between Informational, Normative and Diffuse-Avoidant adolescents on self-esteem and academic achievement.

Although minimal significant differences were noted, a few crucial implications are prominent. A significant difference was found between males and females in the Normative processing style in favour of the females. Thus there are more females than males with identity conflicts that internalize and conform to expectations and prescriptions of authority figures and significant others in a relatively automatic manner (Berzonsky & Kuk, 2005; 2000; Berzonsky et. al, 1999). This is important to note as such individuals are agreeable and conscientious and possess stable foreclosed concepts. They have been found to be highly defensive and intolerant of ambiguity with a tendency to be closed to information that poses a threat to personal values and beliefs, possessing a strong need for structure, have a collective self definition and cognitive closure and utilize defense mechanisms that distort reality (Berzonsky, 2005; Berzonsky et. al, 1999). It is important to note that there were more female participants than male participants on the Normative status and this may have had an influence on the results. However, these results reflect the collectivist (group) values of South Africa rather than the individualistic values of Western countries.

A significant difference was also found between the Informational and Normative groups in favour of the Informational group with regards to academic achievement. Berzonsky & Kuk (2000; 2005) found that students who entered university with an Informational identity style were best prepared to function successfully in a university setting as they were uniquely positively correlated with establishing educational purpose, developing academic autonomy and

developing mature inter-personal relationships whilst students with a Normative identity style also had a clear sense of academic direction but were significantly less tolerant and less academically and emotionally autonomous than their Informational counterparts. This is contrary to what was found in this study. Due to the small sample size of this study further research would need to be conducted to ascertain if this is representative of the South African population.

This study is pertinent within the South African context as the ISI has not as yet been utilized in the country. Education distribution has in the past been unequal in South Africa due to the legacy of Apartheid which needs to be kept in mind in relation to the findings of this study. This needs to be considered in relation to the high first year university failure rate as gaps in education, or an education that does not encompass a full curriculum can result in students being disadvantaged at university in terms of a lack of knowledge or skills.

The South African student population is thus unique in its background and experiences which is shown in the results of this study which are contrary to past international research.

## **5.6. Limitations of the Study**

Whilst this study did indicate that there was a significant difference between males and females on the Normative identity processing style in favour of the females and that furthermore, a significant difference was found between the Informational and Normative groups in favour of



the Informational group with regards to academic achievement, no other major significant differences were found, which was unexpected. Thus certain limitations of the study need to be considered together with suggestions for future research.

A major limitation was that neither the ISI nor the SES was normed on the South African population which is unique in its history and cultural background and traditions.

Secondly the Cronbach Alpha, which is the internal coefficient of a study, was very low as compared to those studies undertaken in Western countries. This could have impacted on the results of this study. Culture could perhaps have played a role.

Thirdly, the sample size of 116 for the SES could have been larger to produce sound results. Although 116 is a valid data set, a larger set could have been advantageous. Data was collected during the Psychology 1 class and with a test the next day many students were not present as they had stayed at home to study which could have influenced a smaller data set. This can be viewed as a limitation to the study as a larger sample size would have increased the validity of the study. However, 116 is a large enough sample size for this study to be valid.

Finally, as research was only undertaken in the Psychology department the data cannot be generalized over the whole university or a representative of South African first year university student's identity.

## **5.7. Suggestions for Future Research**

Several suggestions are put forth:

A follow-up study should be conducted both in the Psychology department and other departments at the university. Such a study could help to validate or question the results found in this study which are contrary to international literature.

A longitudinal study of the same participants from first year to final year could be of great interest to monitor how identity can change in the university setting and the impact of these personal changes on academic performance. Such a study could assist the university in gaining greater insight into their students and thus help to reduce the high first year university failure rates that they currently face.

Limited research, if any, was found on gender identity development in South Africa. Further research should be undertaken on this pertinent topic as it would give a better understanding of the relationship between gender identity development and academic achievement in South Africa. It would also throw light on gender differences in the formation of identity in the South African youth.

As previously mentioned, the data was collected over two days reducing the total sample size. Should this study be replicated, all questionnaires should be administered on the same day to avoid differences in numbers.

A future study could also measure academic self-esteem in particular rather than global self-esteem. This could help to establish if academic self-esteem influences academic performance which is currently a grey area in self-esteem research. Such research findings could be helpful to universities in lowering their failure rate.

## 5.8. Conclusion

Bearing in mind the limitations mentioned above, the following conclusions can be drawn. This study broadly aimed to examine, within the South African context, the differences in males and females identity processing style in relation to academic achievement and self-esteem. A significant difference between males and females on the Normative identity processing style in favour of the females was found as well as a significant difference between the Informational and Normative groups in favour of the Informational group with regards to academic achievement. No other major significant differences were found which was unexpected. This was contrary to other international studies.

This study is pertinent within the South African context as the ISI had not as yet been utilized in South Africa. Many successes have been achieved in South Africa with more South Africans receiving a fair education. Despite the results of this study being contrary to that found internationally, it is important to bear in mind that South Africa is in transition post-Apartheid and that it will take decades to repair the damage incurred on the education system. The role of a changing masculinity also needs to be considered. The results of this study imply that self-esteem may not be a predictor for academic performance with females generally performing better than males in terms of academic performance. Further research is required to supplement these findings.

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## APPENDIXES

### APPENDIX A: Demographic Questionnaire

Please provide the following demographic information:

1. Name:.....Student number.....

2. Age: .....

3. Gender:

Male ☐ Female ☐

4. Race/Ethnicity:

4.1 African ☐ 4.3 Coloured ☐

4.2 Indian ☐ 4.4 Asian ☐

### 5. Home Language:

5.1 Afrikaans ☐ 5.7 English ☐

5.2 Isizulu ☐ 5.8 Ndebele ☐

5.3 Sepedi ☐ 5.9 Sotho ☐

5.4 Swati ☐ 5.10 Tsonga ☐

5.5 Tswana ☐ 5.11 Venda ☐

5.6 Xhosa ☐ 5.12 Other \_\_\_\_\_

### 6. School Type (Matriculation)

6.1 Government school ☐

6.2 Independent school ☐

6.3 Former Model C ☐

6.4 Other \_\_\_\_\_ ☐

## 7. Year of Study

7.1 First Year

☐

7.2 Any other year \_\_\_\_\_

## APPENDIX B: ISI 3

### PERSONAL SIMILARITIES

#### Berzonsky's Scale (ISI3)

### INSTRUCTIONS

You will find a number of statements about beliefs, attitudes, and/or ways of dealing with issues. Read each carefully, then use it to describe yourself. On the answer sheet, circle in the number which indicates the extent to which you think the statement represents you. There are no right or wrong answers. For instance, if the statement is very much like you, mark a 5, if it is not like you at all, mark a 1. Use the 1 to 5 point scale to indicate the degree to which you think each statement is uncharacteristic (1) or characteristic (5) of yourself.

	1) Not at all like me	2) Not like me	3) Undecided	4) Like me	5) Very much like me
1. Regarding religious beliefs, I know basically what I believe and don't believe.	1	2	3	4	5

2. I've spent a great deal of time thinking seriously about what I should do with my life.	1	2	3	4	5
3. I'm not really sure what I'm doing in university; I guess things will work themselves out.	1	2	3	4	5
4. I've more-or-less always operated according to the values with which I was brought up.	1	2	3	4	5
5. I've spent a good deal of time reading and talking to others about religious ideas.	1	2	3	4	5
6. When I discuss an issue with someone, I try to assume their point of view and see the problem from their perspective.	1	2	3	4	5
7. I know what I want to do with my future.	1	2	3	4	5
8. It doesn't pay to worry about values in advance; I decide things as they happen.	1	2	3	4	5
9. I'm not really sure what I believe about religion.	1	2	3	4	5
10. I've always had purpose in my life; I was brought up to know what to strive for.	1	2	3	4	5
11. I have some consistent political views; I have a definite stand on where the government and country should be headed.	1	2	3	4	5
12. I'm not sure which values I really hold.	1	2	3	4	5
13. Many times by not concerning myself with personal problems, they work themselves out.	1	2	3	4	5
14. I'm not sure what I want to do in the future.	1	2	3	4	5
15. I'm really into my major; it's the academic area that is right for me.	1	2	3	4	5
16. I've spent a lot of time reading and trying to make some sense out of political issues.	1	2	3	4	5
17. I'm not really thinking about my future now; it's still a long way off.	1	2	3	4	5



18. I've spent a lot of time and talked to a lot of people trying to develop a set of values that make sense to me.	1	2	3	4	5
19. Regarding religion, I've always known what I believe and don't believe; I never really had any serious doubts.	1	2	3	4	5
20. I'm not sure what I should major in (or change to).	1	2	3	4	5
21. I've known since high school that I was going to university and what I was going to major in.	1	2	3	4	5
22. I have a definite set of values that I use in order to make personal decisions.	1	2	3	4	5
23. I think it's better to have a firm set of beliefs than to be open-minded.	1	2	3	4	5
24. When I have to make a decision, I try to wait as long as possible in order to see what will happen.	1	2	3	4	5
25. When I have a personal problem, I try to analyze the situation in order to understand it.	1	2	3	4	5
26. I find it's best to seek out advice from professionals (e.g., psychologists, doctors, lawyers) when I have problems.	1	2	3	4	5
27. It's best for me not to take life too seriously; I just try to enjoy it.	1	2	3	4	5
28. I think it's better to have fixed values, than to consider alternative value systems.	1	2	3	4	5
29. I find that personal problems often turn out to be interesting challenges.	1	2	3	4	5
30. I try not to think about or deal with problems as long as I can.	1	2	3	4	5
31. I try to avoid personal situations that will require me to think a lot and deal with them on my own.	1	2	3	4	5
32. Once I know the correct way to handle a problem, I prefer to stick with it	1	2	3	4	5

33. When I have to make a decision, I like to spend a lot of time thinking about my options.	1	2	3	4	5
34. I prefer to deal with situations where I can rely on social norms and standards.	1	2	3	4	5
35. I like to have the responsibility for handling problems in my life that require me to think on my own.	1	2	3	4	5
36. Sometimes I refuse to believe a problem will happen, and things manage to work themselves out.	1	2	3	4	5
37. When making important decisions I like to have as much information as possible	1	2	3	4	5
38. When I know a situation is going to cause me stress, I try to avoid it.	1	2	3	4	5
39. To live a complete life, I think people need to get emotionally involved and commit themselves to specific values and ideals.	1	2	3	4	5
40. I find it's best for me to rely on the advice of close friends or relatives when I have a problem.	1	2	3	4	5

## APPENDIX C: Rosenberg's Self-Esteem Scale

### Rosenberg's Self-Esteem Scale

BELOW IS A LIST OF STATEMENTS DEALING WITH YOUR GENERAL FEELINGS ABOUT YOURSELF. IF YOU **STRONGLY AGREE**, CIRCLE **SA**. IF YOU **AGREE** WITH THE STATEMENT, CIRCLE **A**. IF YOU **DISAGREE**, CIRCLE **D**. IF YOU **STRONGLY DISAGREE**, CIRCLE **SD**.

		1. STRONGLY AGREE	2 AGREE	3. DISAGREE	4. STRONGLY DISAGREE
1.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
2.	I feel that I have a number of good qualities.	SA	A	D	SD
3.	All in all, I am inclined to feel that I am a failure.**	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.	I feel I do not have much to be proud of.**	SA	A	D	SD
6.	I take a positive attitude toward myself.	SA	A	D	SD
7.	On the whole, I am satisfied with myself.	SA	A	D	SD
8.	I wish I could have more	SA	A	D	SD

	respect for myself.**				
9.	I certainly feel useless at times.**	SA	A	D	SD
10.	At times I think I am no good at all.**	SA	A	D	SD

## APPENDIX D: Information Letter To Participant



Dear Participant,

My name is Leila Abdool Gafoor, and I am conducting research for the purpose of obtaining a Masters degree in Educational Psychology at the University of the Witwatersrand. The focus of this research is on exploring the relations between identity development, gender, self-esteem and academic performance of first year psychology university students. The primary aim of this research study is to explore the relationship between identity style, self-esteem and academic performance of first year university students. I wish to request your permission to be a participant in my study. In order to do this you will be asked to fill out two inventories, and a biographical questionnaire. Your second term exam results will also be required. The questionnaires ask for identifying data and I intend to use the responses obtained to determine group trends only. Thus confidentiality is assured.

Participation in this study is voluntary. Should you choose not to participate, you will not be disadvantaged. Apart from my supervisor and me, no one else will have access to the data. On completion of my research report the data will be destroyed.

I would appreciate your consent for me to access your marks and for you to complete my questionnaires since this study will provide valuable insight into the issue of identity development in first year

psychology students within the South African context. All questionnaires will be destroyed after I have analyzed them. Should you wish to consent would you be so kind as to sign the consent letter granting me permission.

Thank you for your kindness.

-----

Leila Abdool Gafoor

Cell: 082 453 53 53

E-mail: [abdoolgafoor@yahoo.com](mailto:abdoolgafoor@yahoo.com)

**Supervisor:** Mr Joseph Seabi

[Joseph.Seabi@wits.ac.za](mailto:Joseph.Seabi@wits.ac.za)

011 717 8331

## APPENDIX E: Participant Consent Letter



I -----, do hereby consent to participate in Leila Abdool Gafoor's  
research on the relationship between Identity Style, Gender, Self-esteem and Academic Performance of  
First year Psychology students

(Please Print)----- at ----- on-----

Signature-----

## APPENDIX F: Information Letter To Head Of School



Dear Head of School, Prof. N. Duncan

My name is Leila Abdool Gafoor, and I am conducting research for the purpose of obtaining a Masters degree in Educational Psychology at the University of the Witwatersrand. The focus of this research is on exploring the relations between identity development, gender, self-esteem and academic performance of first year psychology students. The primary aim of this research study is to explore the relationship between identity style, gender, self-esteem and academic performance of first year university students. I wish to request your permission to conduct my research in your school. In order to do this 300 students in your school will be asked to fill out two inventories, and a biographical questionnaire. The questionnaires ask for identifying data and I intend to use the responses obtained to determine group trends only. Thus confidentiality is assured.

Participation in this study is voluntary. Should students choose not to participate, they will not be disadvantaged. Apart from my supervisor and me, no one else will have access to the data. On completion of my research report the data will be destroyed.

I would appreciate your consent for me to conduct my research in your school since this study will provide valuable insight into the issue of identity development in first year psychology students within the



South African context. All questionnaires will be destroyed after I have analyzed them. Should you allow the study to take place in your school, would you be so kind as to sign the consent letter granting me permission.

Thank you for your kindness.

-----

Leila Abdool Gafoor

Cell: 082 453 53 53

E-mail: [abdoolgafoor@yahoo.com](mailto:abdoolgafoor@yahoo.com)

**Supervisor:** Mr Joseph Seabi

[Joseph.Seabi@wits.ac.za](mailto:Joseph.Seabi@wits.ac.za)

011 717 8331