

**An exploration of the interrelationship between intimacy
resolution, coping styles, and suicidal attitudes among a sample
of university students.**

By

Mimi Zulu

Student No: 200308208

Supervisor: S. Ramgoon

SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTERS OF PSYCHOLOGY

(COUNSELLING PSYCHOLOGY)

IN

THE SCHOOL OF PSYCHOLOGY

UNIVERSITY OF KWAZULU NATAL

HOWARD COLLEGE

July 2010

DECLARATION

Submitted in partial fulfilment of the requirements for the degree of
..... in the Graduate Programme in
....., University of KwaZulu-Natal,
Durban, South Africa.

I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. It is being submitted for the degree of in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, Durban, South Africa. None of the present work has been submitted previously for any degree or examination in any other University.

Student name

Date

ACKNOWLEDGEMENTS

I am grateful to the following people for contributing in so many profound ways to this thesis and my academic career.

- Thank you to my supervisor, Sarojini Ramgoon, for your patience during the times when I was getting it wrong, and for your encouragement to keep going when I was almost there.
- To the 200 participants who agreed to be a part of this study. It goes without saying that, without you, there would be no study.
- To Ray Ramdas and Cynthia Patel - thank you for the extra support and for always assisting me so selflessly. You were both such willing “surrogates” when I needed the help, and I appreciate the open door.
- To my family and friends, thank you for the words of encouragement, the inspiration, and the safe place to fall.

ABSTRACT

Whilst much has been written about the determinants of suicidal behaviour within a South African context, few studies have investigated suicidal behaviour from a developmental context. This study explored the relationship between suicidal tendencies, coping styles, and *Intimacy vs. Isolation*. There were 175 participants between the ages of 18 to 24 years. Scales measuring coping, suicidal attitudes, and intimacy resolution were administered. The data was analysed quantitatively. Most significant in the findings is the relationship that exists between intimacy resolution, suicidal attitudes and active coping styles. These and other findings provide an initial but empirically important platform for future research endeavours that aim to understand the incidence of suicide amongst one of the most at-risk groups in South Africa today.

TABLE OF CONTENTS

Declaration.....	i
Acknowledgments.....	ii
Abstract.....	iii
Table of contents.....	iv

CHAPTER ONE: Introduction

1.1. Introduction.....	1
1.2. Key concepts.....	4
1.2.1. Young adulthood.....	4
1.2.2. Intimacy versus isolation.....	5
1.2.3. Suicidal behaviour.....	5
1.2.4. Coping.....	6

CHAPTER TWO: Literature Review

2.1. Introduction.....	7
2.1.1. Suicidal behaviour among young adults.....	7
2.1.2. Attitudes towards suicide.....	8
2.1.3. Gender and suicide.....	9
2.1.4. Race and suicide.....	10
2.1.5. Determinants of suicide.....	12
2.1.5.1. Depression.....	12
2.1.5.2. Self-esteem.....	13
2.1.5.3. Interpersonal precipitants.....	14
2.1.5.4. Coping styles.....	17
2.1.5.5. Coping and gender.....	19
2.1.5.6. Coping and race.....	20

2.1.5.7. Coping and suicide.....	21
2.1.6.8. Coping and intimacy.....	22

CHAPTER THREE: Theoretical Framework

3.1. Introduction.....	24
3.2. Erikson’s psychosocial developmental model.....	24
3.2.1. Adolescence: Identity versus role confusion.....	25
3.2.2. Young adulthood: Intimacy versus isolation.....	25
3.2.3. Measuring intimacy.....	27
3.3. Coping Theory.....	28
3.3.1. Styles of coping.....	28
3.3.1.1. Active coping.....	29
3.3.1.2. Avoidant coping.....	29

CHAPTER FOUR: Methodology

4.1. Introduction.....	31
4.2. Research question.....	31
4.2.1. Hypotheses.....	32
4.3. Research design.....	32
4.3.1. Sample.....	32
4.3.2. Measures.....	33
4.3.2.1. The Multi-Attitude Suicidal Tendencies Scale.....	34
4.3.2.2. Measure of Psychosocial Development.....	35
4.3.2.3. Brief COPE.....	36
4.3.3. Procedure.....	38
4.3.4. Ethical considerations.....	38
4.3.5. Data analysis.....	39

CHAPTER FIVE: Results

5.1. Introduction.....	40
5.2. Frequencies.....	41
5.3. One-way analysis of variance.....	43
5.4. Descriptive statistics.....	45
5.5. Pearson correlation	46

CHAPTER SIX: Discussion

6.1. Introduction.....	48
6.2. Alpha values for the MAST, MPD, and Brief COPE.....	48
6.3. Demographic variables, suicidal attitudes, intimacy, and coping styles.....	49
6.4. Identity and Intimacy	55
6.5. Intimacy and suicidal attitudes.....	56
6.6. Intimacy and coping styles.....	57
6.7 Coping and suicidal attitudes.....	59

CHAPTER SEVEN: Summary

7.1. Introduction.....	61
------------------------	----

CHAPTER EIGHT: Limitations, Conclusion and Recommendations

8.1. Limitations.....	63
8.2. Conclusion and Recommendations	64

LIST OF REFERENCES.....	66
--------------------------------	-----------

APPENDICES

Appendix A: Participant Informed Consent Form.....	89
Appendix B: Demographic Questionnaire.....	93
Appendix C: The Multi-Attitude Suicidal Tendencies Scale.....	94
Appendix D: Identity (R5) and Intimacy (R6) Resolution Scales.....	95

Appendix E: The Brief COPE.....96

TABLES

Table 1: Demographic Variables.....41

Table 2: Means, standard deviations, and One-way ANOVA results by Race43

Table 3: Means, standard deviations, alpha, and t values of gender differences.....45

Table 4: Correlations between MAST subscales, Identity, Intimacy, and COPE.....46

CHAPTER ONE

Introduction

1.1. Introduction

Suicide is rapidly becoming one of the most emergent public health problems of our time (Schlebusch, 2005). Globally, it is the thirteenth leading cause of death, with statistics showing an increase in the incidence of suicide amongst younger people (Burrows, 2005). Suicide rates continue to escalate annually and are projected to exceed over one and a half million lost lives globally by 2020 (Burrows, 2005). According to Bertolote and Fleischmann (2002), it is estimated that approximately 1.53 million people will have died from suicide by the year 2020. These figures are alarming given the ample attention already being paid globally towards preventive and reactive measures to reduce the occurrence of suicidal behaviour.

Suicide in South Africa is a very important health issue. Due to some of the rapid political and social changes in this country, professionals have been interested in the impact of such changes on the health and well-being of South Africans, and on the targeted efforts of health promotion and illness prevention programmes (Burrows & Laflamme, 2006).

Recent South African statistics are showing rates of suicide are growing substantially. It is estimated that suicide has increased by 48% in the past 10 years, with the highest rates amongst children (Newman, 2004). It is estimated that 6000 to 8000 people commit suicide every year, which amounts to 20 to 25 deaths per day, making this pandemic the third largest contributor to death in this country alone (Schlebusch, 2005). A survey by the National Injury Mortality Surveillance System (NIMSS) showed that in 1999, 8% of all non-natural deaths in South Africa were due

to suicide (Meel, 2003b). The latest figures by the NIMSS (2007) show that this figure has increased to 10% (Donson, 2008).

In South Africa suicidal behaviour is complicated further by diverse racial, class, gender and age variables. These sociodemographic variables have been found to significantly shape the face of suicidal expression in this context and are further compounded by critical psychosocial factors such as economic status, culture and religion (Burrows, Vaez, Butchart & Laflamme, 2003).

Historically, research on suicide in South Africa has been inadequate (Schlebusch, Vawda & Bosch, 2003). Over the years, efforts have become more unified and more empirical research is being conducted. However there is still a growing need for more research on suicidality aimed at providing more accurate statistics that can allow for a comprehensive national prevention program.

In understanding the epidemiology of suicide, a number of psychological and social issues have been implicated as risk factors. Factors such as depression, coping, substance use, social support and ego strength have received a lot of empirical attention in the field of suicidality (O'Carroll et al., 1996; Moscicki, 1997). Adaptive coping styles and social support, for example, have been shown, both in South Africa and worldwide, to contribute towards the reduction of suicidal behaviour, through initiatives created by health care programmes who use the empirical evidence and understanding of suicide to inform the public on both health-risk and health-enhancing behaviours. Such an understanding must therefore be critically tied to the dynamic and changing face of suicide in this context, taking cognisance of demographic, psychological and socio-political variables.

The aim of this study is to explore the experience of coping, as a mediating factor of suicidal risk in young adults, within an Eriksonian framework. More

specifically, this study attempts to investigate whether the failure to resolve the psychosocial crisis of *Intimacy* versus *Isolation* (Erikson, 1968), determines the type of coping styles that young adults adopt in the face of life stressors, and the impact that this has on their tendency to report suicidal attitudes to a lesser or greater degree.

An investigation into the determinants of suicide among young adults reveals that interpersonal stressors play a critical role in suicidal ideation, attempts and completed suicides (O'Connor & Sheehy, 2000). Whilst some theoretical perspectives have attempted to explain this phenomenon (e.g., Baumrind, 1991), few studies have investigated the context of psychosocial development among young adults in contributing to the expression of suicidal behaviour (Stillion, McDowell & May, 1989). Even fewer studies have done so within a South African context (e.g., Ramgoon, Bachoo, Patel & Paruk, 2006).

Coping styles are important determinants in suicidal risk and numerous studies have found a link between maladaptive coping and suicidal affect (O'Connor & Sheehy, 2000; Orbach, 1988).

The rationale behind this study was therefore to investigate two seemingly pertinent determinants of suicide, namely coping and interpersonal stressors, specifically among young adults, and to explore whether the developmental task that this age cohort faces plays a role in understanding the styles of coping adopted, as well as the degree of suicidal affect expressed.

1.2. Key concepts

1.2.1. Young adulthood

The key concepts used in this study are the following:

Young adulthood has been defined as the developmental bridge between adolescence and late adulthood (Levinson, 1986). Also referred to as “late adolescence” by some authors (e.g., Carducci, 1998), this developmental cohort spans the ages of 18 to 25 years old. Young adulthood represents an important period in lifespan development. This is the time in which the individual attempts to take steps towards acting out their established identity (Stillion et al., 1989). Depending on one’s culture, some individuals move out of the family home, enter university and expand their social and occupational world (Levinson, 1986). Interpersonal relationships become a prominent feature of young adulthood as individuals move towards the desired goal of finding a life partner and “settling down” (Erikson, 1968). Having moved out of the turbulent stage of adolescence, some stability is afforded to the individual who begins to experiment with their acquired identity and explore their role as friend, lover, student and career person (Levinson, Darrow, Klein, Levinson & McKee, 1978).

Whilst adolescence is generally regarded as the time of ‘storm and stress’ (Arnett, 1999, p.317), the challenges and transitions that young adults experience also makes this developmental period important in terms of understanding problematic mental health outcomes such as suicidal behaviour (Loots, 2008).

1.2.2. Intimacy versus isolation

According to Erikson (1968), the psychosocial crisis of young adulthood is *Intimacy* vs. *Isolation*. He viewed the attainment of intimate connections with others as the successful resolution of ego strength, love or *intimacy*. Individuals who are able to achieve intimacy are expected to display positive psychological well-being, characterized by meaningful and trusting relationships and secure identities (Erikson, 1968). “Intimacy – mature” individuals have healthy conflict resolution strategies and find it easy to establish intimate connections with others, without fear of losing their identity, or being deeply committed (Paul, Poole & Jakubowyc, 1998). They have strong social support networks and are therefore well equipped to cope with life stressors by effectively making use of romantic partners, friends, family and co-workers. They are not only able to initiate intimate connections with others but are able to successfully maintain them by balancing their own needs and desires with those of their partners (Messina & Messina, 2007).

Isolation is the antithesis of intimacy (Erikson, 1968). Individuals without a stable sense of identity are prone to self-absorption and a general disconnectedness from others (Stillion et al., 1989). Increased isolation and poor interpersonal relationships puts “intimacy – immature” individuals at an elevated risk for weak psychological adjustment (Paul et al., 1998).

1.2.3. Suicidal behaviour

Suicidal behaviour has commonly been conceptualized along a continuum, ranging from ideation and contemplating suicide on the one end, to attempts, potentially self – injurious behaviour with a non-fatal outcome (O’Carroll et al., 1996), and completion on the other (Silverman, 2006; Smith, Alloy & Abramson, 2006). An extensive body

of research highlights the importance of being able to make clear distinctions amongst a range of suicidal behaviours (Silverman, 2006). Schlebusch (2005, p.6) defines suicidal behaviour as “a wide range of self-destructive or self damaging acts in which people engage, owing to varying degrees or levels of distress, psychopathology, motive, lethal intent, awareness and expectations of the deleterious consequences or outcomes of the behaviour”.

1.2.4. Coping

Coping can be defined as “the changing thoughts and acts the individual uses to manage the external and internal demands of a specific person – environment transaction that is appraised as stressful” (Folkman, 1991, p.5).

Coping theory provides an important framework for understanding the ways in which individuals appraise events, the outcomes of these appraisals, and how these appraisals are mediated by intrapersonal and interpersonal factors such as self-esteem and social support (Folkman, 1991). For this study, this theoretical framework was seen as an appropriate way in which to understand suicidal attitudes among young adults and the role that maladaptive coping styles play in mediating suicidal behaviour.

CHAPTER TWO

Literature Review

2.1.Introduction

Statistics on suicide reveal that one of the most consistently identified ‘at-risk’ groups for suicidal behaviour is early to late adolescence, commonly between the ages of 15 to 24 years (Flisher, Liang, Laubscher & Lombard, 2004). According to the South African Depression and Anxiety Group (SADAG) (2006), suicide amongst this age group ranks as the third major cause of death in South Africa. The 15 to 24 year age group experiences a wide spectrum of developmental challenges and transitions coupled with psychological and social variables that compound their risk for a number of behavioural and emotional problems such as depression, delinquency, substance use, withdrawal and suicide (Bridge, Goldstein & Brent, 2006; Stillion et al., 1989).

It is beyond the scope of this study to provide an analysis of all the risk factors in suicide. The aim of this literature review is to describe a few of the most common risk factors among young adults with the appreciated understanding that this age cohort is one of the highest risk groups for suicidal behaviour (Greening & Stoppelbein, 2002).

2.1.1. Suicidal behaviour among young adults

Late adolescence or young adulthood has consistently been found to be a high risk developmental period for suicidal behaviour (Borowsky, Ireland & Resnick, 2001; Groholt, Ekeberg, Wichstrom & Haldorsen, 2005; Leenaars, de Wilde, Wenckstern & Kral, 2001; Speckens & Hawton, 2005). An international longitudinal study found that in a sample of over 1000 people, one in ten had attempted suicide once or more by the time they were 26 years old (Nada-Raja, Skegg, Langley, Morrison &

Sowerby, 2004). The latest figures provided by the NIMSS (2007) show that of all suicide related deaths in South Africa, the 20 – 39 year age group accounted for nearly two thirds of all victims. Hanging was the method with the highest overall percentage of deaths by suicide with a total of 58%, followed by poisoning (17%) and firearms (15%). Of the total number of hangings by suicide (n = 1878), 69.2% were in the 15 – 24 year age group, followed by the 25 - 34 year age group with a total of 59.9% (Donson, 2008).

An investigation into the determinants of suicide among young adults reveals that personal factors such as depression, low self-esteem, social and emotional isolation, interpersonal stressors and coping styles are amongst the most recognized in playing a role in the onset, expression and duration of suicidal behaviour (Gillespie, 2005; Groholt et al., 2005; O'Connor & Sheehy, 2000; Stillon et al., 1989).

2.1.2. Attitudes towards suicide

There are few studies investigating young people's attitudes towards their own suicidal behaviours (Zemaitiene & Zaborskis, 2005). A review of the literature shows a few studies done in this regard (e.g., Domino, Gibson, Poling & Westlake, 1980), with most generally focused on third party or public attitudes of permissibility towards suicide, for example, among certain cultural or community groups (e.g., Domino, 2005; Kocmur, 2003), or medical students attitudes towards suicide patients (Wallin & Runeson, 2003), as well as the controversial topic of euthanasia or assisted suicide.

Studies investigating suicidal attitudes amongst adolescents have found that suicide is becoming an increasingly agreeable attitude especially among young children (Zemaitiene & Zaborskis, 2005). These authors found that self-determination

as a human right, as measured by the question, "*What do you think, does a person have the right to choose to live or to take away his own life?*" was a significant factor associated with suicidality. They found that in those adolescents with a positive attitude towards suicide as a human right, they had made a suicide attempt twice more than those with negative attitudes, and that males scored higher in this regard than females. Gutierrez, King and Ghaziuddin (1996) found a relationship between attitudes towards life and death and suicidality in a sample of adolescent psychiatric inpatients. Beautrais, Horwood and Fergusson (2003) found that overall young adults had very divergent attitudes towards suicide, with some holding the view that suicide was in some circumstances justifiable (e.g. in the cases of euthanasia), but that in other cases regardless of how bad things may seem, suicide was not the solution. A study by Gibb, Andover and Beach (2006) that investigated the relationship between suicidal ideation and attitudes towards suicide, found that in men with positive attitudes towards suicide, symptoms of hopelessness and depression were more significantly related to suicidal ideation.

2.1.3. Gender and suicide

Empirical research on gender differences in suicidal behaviour has consistently shown that males engage more frequently in fatal suicidal acts than females (Cantor, 2000; Hawton, 1992; Kelly & Bunting, 1998), whilst females report more suicidal thoughts and attempts (Burrows & Laflamme, 2006; Langhinrichsen-Rohling et al., 1998; Laux, 2002; Leenaars, Maris & Takahashi, 1997). In South Africa, the NIMSS (2007) found that for every 1 female that committed suicide, there were 4.6 male victims (Donson, 2008).

This has mostly been explained in terms of the more lethal and aggressive methods that males employ under psychological stress (Hawton & Harriss, 2008;

Kerr, Owen, Pears & Capaldi, 2008). Weapons such as firearms are more readily available and familiar to males than females (Maris, Berman, Silverman & Bongar, 2000). Men tend to display more aggression, intent, and knowledge of ways in which to cause bodily harm, and tend to do so through the use of more lethal and dangerous means such as weapons or hangings (Hawton, 2000). They are therefore more likely to complete the act. Females on the other hand have greater access to protective factors such as religion, motherhood, family and social support.

Low rates of completed suicide attempts in females have also been explained by lower suicidal motivation, where attempts or thoughts of death are viewed as more of a communicative means to express distress, or to change the offending behaviour of others (Hawton, 2000). Women are also socialized into accessing help more readily and effectively than males. According to Murphy (1998), women talk to their friends and doctors about their personal experiences, and are therefore more likely to get treatment for their problems, including their depression. This becomes in effect a coping mechanism, what Murphy (1998) regards as “problem-solving” and protecting against suicide.

Cognitive differences on suicide have suggested that women are more inclusive in their attempts to solve a problem (Murphy, 1998). Men are regarded as more impulsive and give less consideration to other people in processing a problem and taking action. Women are more likely to consider the impact of their decisions on others when determining a course of action (Murphy, 1998).

2.1.4. Race and suicide

Given the complex and historically significant representation of race in South Africa, race as a variable receives a lot of attention in most empirical studies on psychology.

Globally, in so far as suicide and race are concerned, the literature is considerably large and ever growing. However Lester (1988) significantly points out that it is only in the past 30 odd years that suicidology as a discipline has shown empirical respect to the incidence of suicide among Black people. Burrows et al. (2003) explain how historically the collection and documentation of statistics on suicide rates amongst Black people in South Africa have been flawed.

Historically, the Indian population have shown high rates of suicide at least until 1960 particularly in the Natal area (Meer, 1976). Whites have since shown elevated rates of suicide. The lower rates of suicide among African and Coloured men was attributed to their 'externalising aggression' tendencies (Meer, 1976).

In a review of the South African Stress and Health Study (SAHS), in which data from a sample of 4351 adults, 18 years above, between the periods of 2002 and 2003 was analysed, the authors found that the rates of suicide attempts varied significantly amongst the different ethnic groups (Joe, Stein, Seedat, Herman & Williams, 2008). They found that Coloureds reported higher rates of attempted suicide than Whites, Blacks and Indians. (7.1%: 2.4%: 2.4%: 2.5%, respectively). They also found that Blacks (5.6%) were less likely to engage in an impulsive suicide attempt than Whites (10.0%) and Indians (27.0%). Coloureds again reported the highest levels of impulsive suicide attempts.

A cross-cultural analysis of suicidal attitudes amongst adolescents between the ages of 17 to 24 years in a secondary school in South Africa, found that attitudes were highest amongst Asians followed by Whites and then Blacks, and that attempts at suicide were correlated with these findings, with Asians having the highest suicide attempts (13.5%) followed by Whites (13%) and lastly Blacks with 11.3% (Peltzer, Cherian & Cherian, 2000). The low rates of suicidality in Blacks suggest that this race

group expresses a negative attitude towards taking one's own life. This may be explained in terms of the African worldview which sees suicide as the last resort in face of stressful situations (Lester, 1998).

Recent statistics on suicide point to the increasing incidence of suicide amongst the White population (Burrows & LaFlamme, 2006), who are now faced with issues such as job loss, affirmative action and other political and social challenges in a post Apartheid context.

2.1.5. Determinants of suicide

2.1.5.1. Depression

Psychiatric disorders are often correlated with suicidal behaviours. In South Africa, it is estimated that 5 million people suffer from psychiatric illness, according to the South African Society of Psychiatrists (SASOP) (Meel, 2003b).

Depression is one of the most consistently identified risk factors showing a high comorbidity with suicidal behaviour (Flisher, 1999; Spann, Molock, Barksdale, Matlin & Puri, 2006). According to Maris (1991), 15% of individuals who are depressed eventually take their lives. Psychological autopsies on adolescent suicide revealed that three out of four adolescents who committed suicide were depressed (Holden, 1976). Depression is characterized by feelings of hopelessness, lethargy, irritability and anger (O'Connor & Sheehy, 2000). Depressed individuals who express feelings of anger, hostility and irritability are more likely to *attempt* suicide whereas individuals who are apathetic are more likely to successfully *complete* a suicide attempt (O'Connor & Sheehy, 2000).

Social and emotional isolation are also important factors in predicting depression among individuals (Orbach, 1988; Petersen & Craighead, 1986). According to Hirschfeld and Blumenthal (1986), interpersonal stressors such as lack of social support, increase the risk of depression in some individuals. Interpersonal failures can cause some individuals to isolate themselves from others, leading to the onset of negative affect such as withdrawal, boredom, rumination and therefore the likely onset of depression and suicide. Depression among young adults is commonly associated with emotional states such as low self-worth, guilt and hopelessness (Petersen & Craighead, 1986).

A South African study investigating the impact of depression and self-esteem in the suicidal behaviour of young adolescents found that depression and low self-esteem were associated with suicide ideation and attempts within a family context (Wild, Flisher & Lombard, 2004).

Human immunodeficiency virus (HIV) research in South Africa is an important area given the very high figures of HIV/AIDS in this country. It is estimated that nearly four million people are infected with HIV (Meel, 2003b). There is a significant correlation between HIV and depression, where most individuals with HIV suffer from depressive symptoms (Judd, Mijch, McCausland & Cockram, 1997; Kalichman, Rompa & Cage, 2000). This therefore increases their risk towards suicidal behaviours (Meel, 2003b).

2.1.5.2. Self-esteem

Self-esteem needs are important for young adults (Stillon et al., 1989). A sense of competence is derived from activities such as finishing school, starting a career and making relationships work. How individuals view and value themselves has important

consequences for understanding how they behave (Stillon et al., 1989). There are a number of factors that determine the level of self-esteem in individuals (Messina & Messina, 2007). Among young adults, interpersonal issues are strong predictors of self-esteem. Individuals who feel nurtured and validated by their peers, family and colleagues report with higher levels of self-esteem (Groholt et al., 2005). For this reason, Baumeister, Campbell, Krueger and Vohs (2003) regard self-esteem to be an important measure of one's success or failure in acquiring social and other forms of interpersonal support.

High self-esteem has also been found to be a protective factor against suicidal behaviour (Orbach, 1988). According to Baumeister et al. (2003), people with low self-esteem are more likely to engage in self-destructive acts. A recent study by Hull-Blanks, Kerr and Kurpius (2004), found that among adolescent girls between the ages of 13 and 19 years, those with low self-esteem engaged in more self-destructive acts than those with high levels of self-esteem.

2.1.5.3. Interpersonal precipitants

Interpersonal activity signifies an important developmental milestone in the life of the young adult (Carducci, 1998). According to Erikson (1968), young adulthood is characterized most consistently by the desire to secure interpersonal commitments that lay the foundation for long-term companionship and marriage.

Object Relations Theory (Ainsworth, 1969), for example, identifies interpersonal attachments as a critical component to defining personality development and links psychopathology with problems in having certain interpersonal needs met, stemming most significantly from the childhood relationship between mother and child, and other psychodynamic processes such as attunement and attachment.

Suckling and feeding behaviour for example, in the early infant years shapes the nature and quality of the infant's relationships in later years (Cardillo, 1998). "Life-stage related changes in stress, tension, and needs are based on the outcome of (such) coping attempts formed during infancy" (Cardillo, 1998, p.1).

Object Relations is a popular theory in the context of some personality disorders, including Borderline Personality Disorder (BPD), to explain pathological disturbance and resulting behaviours, such as suicide. According to Vivona (1996), early experiences characterised by parental disturbances and inconsistent parenting relationships, are repeatedly associated with suicidal ideation and attempts in adolescence and young adulthood.

Attachment Theory (Ainsworth & Bowlby, 1991) is commonly used to understand problematic interpersonal issues that adults present with. The type of bond between mother (or caregiver) and child leads to the formation of either a secure or insecure attachment. Insecure attachment has been associated with problematic psychological outcomes such as anxiety, depression, various personality disorders and suicidal tendencies (Crawford et al., 2006; Gullotta, Adams & Ramos, 2005; Stepp et al., 2008). According to McAdams (1989, p.140), "the attachment bond serves as a prototype and provides the earliest pattern for warm and close relationships". In other words, people who have secure early attachments with caregivers are likely to be stable and adaptive in their adult relationships, whereas those with insecure attachments are likely to be unstable and use maladaptive coping styles within adult relationships.

Interpersonal precipitants are commonly associated with suicidality in young adults (O'Connor & Sheehy, 2000). Parasuicide amongst university students has been found to be precipitated by relationship problems such as a recent break-up, high

levels of conflict and hostility. Parasuicidal individuals often use suicidal behaviour as problem-solving strategies in an attempt to deal with the psychological pain associated with the termination of their relationships (O'Connor & Sheehy, 2000). A study by Weyrauch, Roy-Byrne, Katon and Wilson (2001), found that 47% of individuals who had engaged in suicidal attempts cited conflict with a partner as the main reason for the attempt.

Healthy interpersonal relationships have ameliorative effects on one's mental health (Zhang & Jin, 1998). Individuals who lack meaningful interpersonal relationships are more vulnerable to anxiety as well as higher levels of depression. A study by Paul et al. (1998) that looked at intimacy development and its implications for college transitions found that individuals who had secure intimate relationships had higher self-esteem, emotional maturity, and active coping skills in the face of difficulties.

Durkheim's (1951) sociology theory, posited that social integration was a critical component in preventing suicide. He was of the view that an individual's attachment to society, i.e. the extent to which they feel they belong, are in contact with, and can interact meaningfully with others, plays a key role in predicting their susceptibility towards suicidal behaviour. Durkheim's theory posited that individual psychological issues played only one part in understanding suicidality, and that more importantly, the individual's relationship to society played a far more meaningful role in understanding suicide rates. In a study by Baumeister and Leary (1995), it was found that individuals who lacked belongingness, "a minimum quality of lasting, positive and significant interpersonal relationships" (p.497), were more distressed and disappointed than individuals who had high levels of belongingness.

Loss of social support has also been implicated as a risk factor for suicide (Kgosimore & Mafokane, 2006). The loss of a lover or close friend increases feelings of isolation, withdrawal and depression that elevate the risk for suicidal behaviour.

Suicide in young female adults has been found to be precipitated by negative life events such as interpersonal loss, especially among females who lack strong social support systems and who do not have someone significant to confide in (Hirschfeld & Blumenthal, 1986). In a study that examined the suicide notes of early and late adolescents who had completed suicide, interpersonal failure was one of the significant factors associated with the motive behind the act (Leenaars et al., 2001). Studies have found that individuals who lack intimate relationships report more stress-related symptoms and are more susceptible to physical illnesses and other mental health disorders than those in secure relationships (Hook, Gerstein, Deterich & Gridley, 2003).

2.1.5.4. Coping styles

Coping spans a spectrum of both adaptive and maladaptive behaviours that are important in understanding how individuals respond to different stressors. Research on coping styles has looked at how individuals manage and adapt to stressful events, and how this predicts positive as well as negative psychological well-being (Gillespie, 2005). Cognitive diathesis-stress models are often used to explore risk factors in enhancing vulnerability in relation to psychological health. Factors such as negative attributional or explanatory styles are associated with higher risk for depression (Broderick & Korteland, 2002).

Suicide risk has been shown to be higher in individuals who lack the ability to cope and reason clearly (Portes, Sandhu & Longwell-Grice, 2002). Coping styles can

generally be divided into two categories, *problem-focused* and *emotion-focused* coping (Folkman & Lazarus, 1980). Research shows that individuals employ both forms of coping to deal with certain events, and neither are exclusively adaptive or maladaptive. Strategies that can be regarded as either positive (*adaptive*) or negative (*maladaptive*) have also received a lot of empirical attention (Brown, Westbrook & Challagalla, 2005; Seiffge-Krenke, 2004; Vosvick et al., 2002).

What determines the use of either strategy depends largely on the context, the individual, and the nature of the stressor. Individuals can also make use of both *problem-focused* and *emotion-focused* coping in any given situation (Strutton & Lumpkin, 1994).

Problem-focused coping (PFC) involves constructive and direct attempts towards minimizing, modifying, or obliterating a stressor (Carver, 1997). PFC strategies can include active coping through taking action, use of instrumental support such as seeking assistance, information or advice, as well as planning; attempts at confronting and dealing with a stressor (Carver, 1997; Rohland, 1998). PFC has been found to be effective in dealing with a variety of life events and stress related issues, such as anxiety (Weinstein, Healy & Ender, 2002), chronic illness (Ransom, Jacobsen, Schmidt & Andrykowski, 2005), and job related stress (Shimazu & Schaufeli, 2007), and has also been shown to have ameliorative effects on suicidality in adolescence (Range, 1993).

Emotion-focused coping (EFC) aims at managing and tolerating the emotional reactions to stress and includes the use of social support, positive reframing, avoidance, and distancing among others. Research into EFC has found it to be a popular coping mechanism, especially in the face of stressors that cannot be resolved

through problem-solving or reasoning (DeGraff & Schaffer, 2008), as well as in situations that are perceived by the individual to be less controllable.

A study by Penley, Tomaka and Wiebe (2002) found EFC to be less predictive of health outcomes, as compared to PFC. In a study investigating the perception of stressful events of undergraduate students, PFC was associated more with higher levels of controllability (Park et al., 2005).

2.1.5.5.Coping and gender

Research investigating differences in how males and females cope has found links between the style of coping and vulnerability to psychological distress (Broderick & Korteland, 2002). Females, who have higher rates of depressive symptoms have been found to engage more frequently in rumination as a coping style (Morrow & Nolen-Hoeksema, 1990; Pyszczynski & Greenber, 1987). Rumination is a form of passive avoidance that involves mulling over the causes and consequences of one's depressed mood (Smith et al., 2006). The authors found that, coupled with poor cognitive styles such as hopelessness and depressogenic thinking, individuals who engaged in a ruminative response style in the face of a stressor, were more vulnerable to suicidal thoughts. Rumination and hopelessness also sustained the duration of suicidal ideation amongst these individuals.

Regarded as an emotion-focused coping style, rumination involves dealing with problems by internalising negative feelings and thoughts, for example, through isolation, journal writing, repetitive talking or thinking about a negative experience (aimed towards gaining personal insight) (Broderick & Korteland, 2002). Rumination exacerbates a depressed mood and hence is a risk factor for suicide. Ruminative

strategies have been associated with a range of problems including interpersonal difficulties, as well as low self-efficacy (Lyubomirsky & Nolen-Hoeksema, 1995).

Prescribing to certain gender role stereotypes has often been used to understand why females adopt more maladaptive coping styles than males. Females are generally seen as more submissive and dependent whereas males are aggressive and assertive (Eisler, Skidmore & Ward, 1988). These socialization differences are believed to also correlate with the expression of mental health problems.

2.1.5.6. Coping and race

A number of studies have investigated the effects of race in relation to various health seeking behaviours, psychological well-being, as well as socio-political events (e.g., Harburg, Gleiberman, Russell & Cooper, 1991; Knight, Silverstein, McCallum & Fox, 2000; Leserman, Perkins & Evans, 1992). The relationship between race and suicide has also received a lot of attention in the literature (e.g., Haycock, 1989; Joe & Marcus, 2003; Manton, Blazer & Woodbury, 1987).

Evans, Tsao and Zeltzer (2008) point out the importance of race, like gender or age, as a familial and socioculturally defined process that impacts on the perceptions we attach to life events, and therefore predicts the manner in which we cope with such events. Therefore race, as a social rather than biological construct becomes important when understanding psychological constructs such as coping, suicide, and self-esteem.

Some studies have found coping to have a significant relationship to race, whereas others have found race to have no relationship to coping. Kiecolt, Hughes and Keith (2009) found *John Henryism*, regarded as an active coping style, to be positively related to mental health, regardless of both race and socioeconomic status. Anshel, Sutarso and Jubenville (2009) found that among competitive athletes, race

influenced the coping process in relation to stress. They found that Caucasian athletes experienced higher stress levels than African Americans on measures of acute stress. Furthermore, they found that Caucasians made more use of an approach-behaviour coping style. A study investigating both general (i.e. *problem-focused* and *emotion-focused*) and Afri-cultural forms of coping (e.g. spiritual-centered, collective and ritual-centered) found that Blacks made use of both in the face of racial discrimination.

2.1.5.7.Coping and suicide

Internalizing strategies such as self-blame are common predictors of suicide attempts and plans (Speckens & Hawton, 2005). The authors argue that a deficit in problem-solving skills is a major psychological determinant in suicidal behaviour. Coping styles such as withdrawal, avoidance, self-blame, and denial have been implicated in negative feelings such as depression, anxiety and suicidal ideation, and are also correlated with self-destructive and harmful behaviours (Speckens & Hawton, 2005).

Maladaptive coping strategies such as denial, withdrawal and substance use have been implicated in increasing the risk of self-harm (Kgosimore & Mafokane, 2006). Self-destructive behaviours have been found to be a way of dealing or coping with emotional pain, but in some cases, without suicidal intent. Nada-Raja et al. (2004), for example, found that individuals who had engaged in self-harm behaviours, such as cutting themselves or taking an overdose, had done so without the wish or expectation to die, but rather to avoid their unbearable emotional pain.

A South African study by Wild, Flisher, Lombard and Bhana (2004) looking at suicidality, substance use and self-esteem in South African adolescents found that self-esteem served as a protective factor against risk behaviours such as cigarette,

drug, alcohol use and suicidal ideation. Another South African study by the SAHS found that the presence of a substance disorder increased the possibility of a suicide attempt more so than any other DSM disorder diagnosis (Joe et al., 2008).

Avoidant coping, such as denial and withdrawal, have been found to predict suicidal behaviour in some individuals (Smith et al., 2006). Marusic and Goodwin (2006) found that avoidant coping styles were more frequent amongst individuals who had deliberately harmed themselves, suggesting a venting of prolonged internalisation of feelings.

2.1.5.8. Coping and intimacy

Coping is also strongly mediated by social, personal and cultural factors (Ward, Bochner & Furnham, 2001). Interpersonal relationships play a large part in shaping how we cope, and according to Cardillo (1998, p.1), “psychological maturity involves integrating intimacy into a life framework that encompasses all parts of the self”. Studies have found that individuals from supportive family backgrounds, for example, are likely to cope better than individuals from families characterized by disruption, turmoil and conflict (Madu, 2004). Individuals with rich social support networks also cope better than individuals who are isolated (Ward et al., 2001). Baumeister and Leary (1995) found that individuals who had an intimate confidant reported higher morale in the face of stressors.

Individuals in intimate relationships report more contentment, well-being and make use of more social support in times of distress (Hook et al., 2003). Intimate relationships act as buffers against stress by allowing individuals to vent their emotions to someone they trust, in a context that they feel safe in. A study comparing levels of psychological distress among married and single individuals found that

individuals who were married showed less vulnerability to disease, morbidity and disability (Lin & Westcott, 1991).

There are a number of other determinants, beyond the review presented above, that are associated with suicidal behaviour (McBee-Strayer & Rogers, 2002). The aim of this literature review was to merely highlight the determinants that have been consistently identified as increasing the vulnerability of suicide among young adults. The literature suggests that the style of coping plays an important role in mediating the expression of suicidal behaviour (Speckens & Hawton, 2005). Understanding the role of interpersonal precipitants such as relationship disengagement and lack of social support is important in appropriately contextualizing the propensity that some individuals have to cope in a less than adaptive way.

This study therefore aims to place suicide within this important context, and hypothesizes that successfully resolving the important developmental task of *Intimacy* vs. *Isolation* is likely to increase the use of more adaptive styles of coping, which should in turn lead to less suicidal affect, as these individuals are equipped with a stable relational identity that allows them to cope more effectively with life stressors. Individuals who fail to resolve this important task are more likely to report maladaptive forms of coping, which in turn may lead to suicidal tendencies.

The hypotheses for this research are guided by the theoretical framework of Erikson's (1968) Psychosocial model of development as well as the Coping theory of Carver, Scheier and Weintraub (1989).

CHAPTER THREE

Theoretical Framework

3.1.Introduction

A review of the literature has revealed that among young adults, between the ages of 18 and 24 years, suicide is strongly mediated by interpersonal issues such as lack of social support, relationship conflict, loss and a failure to establish intimate romantic connections with others (O'Connor & Sheehy, 2000). According to Erikson's (1968) Psychosocial model, negotiating the stage of *Intimacy vs. Isolation* is a central developmental task for young adults.

Guided by this model, this study attempts to link one of the commonly identified precipitants of suicide (coping style) to the central developmental task of young adulthood. In doing so, attempts are made to explain how issues such as interpersonal support and stable romantic relationships impact on the young adult, and secondly, how the failure to resolve or meet these desired goals is likely to precipitate behavioural and emotional problems such as maladaptive coping and suicidal tendencies.

3.2.Erikson's Psychosocial Developmental Model

Erikson's (1968) Psychosocial Developmental Model is one of the most widely used theoretical frameworks for understanding human development across the lifespan (Leenaars et al., 2001; Portes et al., 2002; Zuschlag & Whitbourne, 1994). Erikson's (1968) theory of development extends from birth to late adulthood, describing eight stages of psychosocial maturation characterized by tasks or crises that the individual needs to successfully resolve in order to move onto the next developmental stage and adapt to the demands expected of him or her at that particular stage (Carducci, 1998).

Failure at resolution can lead to negative and cumulative consequences that make it difficult for the individual to cope with the challenges that lie ahead in later stages (Erikson, 1968).

3.2.1. Adolescence: Identity versus role confusion

Early adolescence, between the ages of 12 to 18 years, is characterized by the negotiation of the stage *Ego Identity vs. Role Confusion*, whereby the adolescent attempts to forge an identity for himself or herself, by answering the existential question, “Who am I?” (Crow & Crow, 1965). *Identity* formation has been widely recognized as one of the most fundamental life tasks of human development (Bosma & Jackson, 1990; Giesbrecht, 1998; Shapka & Keating, 2005), leading to the attainment of a stable and secure sense of self. A healthy identity forms the basis of what the individual can accomplish, including healthy perceptions of self as well as positive and meaningful relationships with others (Carducci, 1998). It is this identity that anchors the individual for the rest of his/her life. As the individual progresses to the next developmental stage of *Intimacy vs. Isolation* and other stages, the establishment of a healthy ego identity allows him/her to successfully resolve the demands expected of him or her at these stages.

3.2.2. Young adulthood: Intimacy versus isolation

Intimacy is the central developmental goal of late adolescence or young adulthood, typically between the ages of 18 and 26 years (Feldman, Gowen & Fisher, 1998). According to Erikson (1968), the task of the young adult during this stage involves securing intimate relationships with others that lay the foundation for marriage and long-term companionship. Erikson (1968) viewed the successful resolution of this

stage as the attainment of the vital ego strength or virtue: love. The central task is being able to fuse one's identity with another in a healthy, constructive, non-self-defeating manner (Paul et al., 1998).

Individuals who open themselves up readily to the experience of intimacy through a healthy relational identity, and a positive attitude towards commitment and negotiation, are less likely to report suicidal affect (Kleinke, 1998). These individuals, even if alone, make use of social support networks, as well as adaptive coping responses, in the face of what can only be regarded as unavoidable but temporary isolation. They are likely to have a healthy perception of self and are able to merge their identity with others in a compromising but non self-defeatist way. They are able to cope with isolation as an appraisal of solitude and use those opportunities to engage in self-fulfilling activities (Kleinke, 1998).

One of the goals of this study is to ascertain whether individuals who have successfully established intimacy, will make use of adaptive coping responses in the face of a possible stressor, and whether this will impact on their suicidal attitudes.

Individuals who lack a stable secure identity cannot merge self with other and experience instead, deep isolation (Erikson, 1968). According to Hendrick and Hendrick (1992), an individual cannot share him or her self with another if there is no self to be shared. Erikson (1968, p.168) describes isolation as “a disintegration of the sense of inner continuity and sameness; a sense of overall ashamedness, and an inability to derive a sense of accomplishment from any kind of activity”.

Isolation is characterized not just by the absence of meaningful relationships, but also by relationships characterized by insecurity, over dependency, a self-defeating tendency to sacrifice one's own sense of self for another (Paul et al., 1998), and in this way “fusion with another becomes identity loss” (Erikson, 1968, p.168).

Individuals who fail to achieve the important task of *Intimacy* have relationships that are characterized by higher levels of conflict as well as a tendency to resort to avoidant coping strategies such as withdrawal and isolation.

3.2.3. Measuring intimacy

According to Erikson (1968), success in achieving a healthy ego identity, the developmental crisis of adolescence, plays an important role in an individual's ability to successfully achieve the next crisis of young adulthood. Erikson viewed intimacy-mature individuals as those who have successfully resolved the crisis of *Identity* vs. *Role Confusion*, and who are thus able to bring with them into adulthood, a stable sense of self, and to fuse their identities with another without fear of identity loss. *Isolation* therefore occurs in the absence of a strong ego identity (Erikson, 1968). These individuals either avoid intimate connections with others or depend too heavily on others in order to define themselves.

Identity consolidation has been extensively researched (Bosma & Jackson, 1990; Marcia, 1980), and research findings have shown that a healthy ego identity has some important health outcomes, including buffering against suicidal affect (Leenaars et al., 2001; Ramgoon et al., 2006). Recognizing the importance of ego identity, few studies have separated this crisis from investigations into intimacy development (e.g., Huang, 2006). According to Meacham and Santilli (1982), *Identity* and *Intimacy* cannot be regarded as isolated crises.

This study will therefore measure successful resolution of *Intimacy* vs. *Isolation*, as a function of successful *Identity* resolution, guided by this important theoretical reasoning. It is hypothesized that high scores on *Identity* resolution will

correlate with high scores on *Intimacy* resolution, suggesting successful resolution of the stage *Intimacy* vs. *Isolation*.

3.3.Coping theory

Coping plays an important role in understanding the health outcomes of individuals (Frydenberg, 2004). How individuals deal with stressful events has important implications for determining their capacity for future healthy adjustment. In the face of a particular stressor, a range of factors play a role in determining whether individuals cope effectively or not. Coping theorists such as Lazarus and Folkman (1984) have understood the importance of placing an individual's ability and resourcefulness to cope within a greater social, political and economic forum.

A contextual model of coping considers a range of biological, personal and socio-environmental factors that are likely to influence an individual's appraisal of an event as stressful, as well as the use of a particular coping style (Folkman, 1991). Such factors include personal issues such as self-esteem and self-efficacy, whilst at an interpersonal level, relationship conflict, as well as quality and availability of social support are also important in understanding an individual's coping efficacy.

3.3.1. Styles of coping

Coping has two mutually facilitative functions; *problem-focused*, to manage the problem, and *emotion-focused*, to regulate the emotional response to the problem (Folkman et al., 1991). Within these two broad coping frameworks, a number of coping styles aim to either resolve the problem or regulate the emotion related to it.

Depending on the situation or stressor, different styles of coping are regarded as either *adaptive* and functional, or *maladaptive* and dysfunctional (Carver et al.,

1989). Typically, theorists and researchers have described the difference between active and avoidant coping styles as being adaptive and maladaptive or dysfunctional respectively (Carver et al., 1989).

3.3.1.1.Active coping

Active coping strategies are aimed at changing the nature of the stressor and taking active steps towards reducing it (Carver et al., 1989). These coping styles are regarded as more conducive to healthy psychological outcomes. Such strategies include behavioural responses such as seeking emotional support or advice, taking positive action, interpersonal conflict resolution and decision-making (Folkman et al., 1991). Active or PFC has been associated with higher levels of adjustment in adolescents and young adults especially in response to interpersonal stressors (Compas & Phares, 1991).

3.3.1.2.Avoidant coping

Avoidant coping aims at circumventing a stressful event (Carver et al., 1989). Such strategies include engaging in acts that take the individual away from the stressor, for example through substance use, withdrawal and behavioural or mental disengagement. These strategies have been associated with higher vulnerability for adverse psychological risks such as depression and problematic health outcomes.

Avoidant coping styles have also been associated with personality dispositions such as low self-esteem, low confidence and pessimism (Carver et al., 1989). Avoidance is also more likely to predict social isolation and avoidance of intimacy (Kleinke, 1998). Individuals who avoid getting close to others and being intimate in their relationships often end up alienating themselves.

Coping plays an important role in understanding how individuals respond in the face of particular stressors and how this mediates their health and adjustment outcomes. Coping styles or responses are also strongly mediated by variables such as the quality and availability of interpersonal relationships and social support.

This study attempts to investigate whether individuals who are successful in achieving intimacy maturity, are also likely to cope more effectively with stressful life events, as compared to intimacy-immature individuals, who, through a lack of social support and isolation, are more likely to adopt avoidant coping styles.

The above theoretical framework will be used to analyse and understand the data generated by this study.

CHAPTER FOUR

Methodology

4.1.Introduction

The aim of this research was to investigate the relationship between the resolution of *Intimacy vs. Isolation*, coping styles and suicidal attitudes among young adults. The choice of a quantitative approach was strongly motivated by the theoretical framework guiding the topic for this research. This approach has been used by numerous other studies investigating stage resolution (Crawford, Cohen, Johnson, Sneed & Brook, 2004; Huang, 2006; Johnson, 1993; Zuschlag & Whitbourne, 1994). The author therefore felt it would be appropriate to follow in the steps of previous researchers such as Hawley (1988).

Secondly, accessing the incidence and prevalence of suicidal tendencies amongst young adults is made easier when adopting quantitative methodologies such as scales or questionnaires. Questionnaires have long been appreciated as a methodological tool for providing anonymity to participants which allows for open and honest responses (Neuman, 1997). This will be an important advantage in light of the aims of the present study.

4.2.Research question

This study attempted to investigate whether the resolution of the crisis of *Intimacy vs. Isolation* mediated the coping strategies that individuals adopt in the face of a particular stressful event, and whether this contributed to determining their propensity to report with suicidal attitudes to a lesser or greater degree.

The research question for this study was therefore as follows:

Are individuals who successfully resolve the crisis of *Intimacy vs. Isolation* more likely to adopt adaptive coping strategies in the face of a stressor, and to what extent do these intimacy-mature individuals report with negative suicidal tendencies?

4.2.1. Hypotheses

1. *Intimacy* resolution is positively correlated with adaptive coping strategies, and negatively correlated with maladaptive coping strategies.
2. *Intimacy* resolution is positively correlated with attraction to life and repulsion by death, and negatively correlated with attraction to death and repulsion by life (subscales of the Multi-Attitude Suicidal Tendencies Scale) (Orbach et al., 1991).
3. Adaptive coping (AC) styles are positively correlated with attraction to life and repulsion by death and negatively correlated with attraction to death and repulsion by life.
4. Maladaptive coping (MC) styles are positively correlated with attraction to death and repulsion by life and negatively correlated with attraction to life and repulsion by death.

4.3. Research design

4.3.1. Sample

The target sample for this study was young adults. Through convenience sampling, a sample of second and third year university students was chosen to participate in the study. These groups of individuals meet the age requirements for young adulthood;

most second and third level students are typically between the ages of 18 to 24 years. Research has also found that amongst university students, issues around identity and intimacy are important in the appraisals that these individuals make of life satisfaction, academic performance and general mental health (Paul et al., 1998). Investigating these issues amongst this group is therefore likely to produce some important findings concerning how young adults feel about intimacy achievement in relation to their perceived ability to cope.

Participants were asked to fill out a demographic questionnaire for the purposes of statistical analysis (see Appendix B). The original sample size was 200. No participants were discriminated from participating in this study on the basis of gender, race or ethnicity. Out of the original 200 questionnaires, only those that met the age requirements, that is, between 18 and 24 years old, were included. This left 175 questionnaires for analysis. Of this sample, there were 34 males and 141 females. 59 were Black and 41 were White. There were 66 Indian students and 6 Coloured. The remainder were categorized as Other, of which there were 3.

4.3.2. Measures

The three scales administered in this study were the Multi-Attitude Suicidal Tendencies Scale (MAST) (Orbach et al., 1991), to measure suicidal attitudes, the Measures of Psychosocial Development (MPD) (Hawley, 1988), to measure resolution of the crises of *Identity* and *Intimacy*, and the Brief COPE (Carver, 1997), to measure active vs. avoidant coping strategies.

4.3.2.1. The Multi-Attitude Suicidal Tendencies Scale (MAST) (Orbach et al., 1991).

The MAST (Orbach et al., 1991) (see Appendix C) was used to measure suicidal attitudes. This is a self-rating 5-point scale with 30 items that measures four dimensions, attraction to life, repulsion by life, attraction to death and repulsion by death. All items are reverse scored. The authors describe the attitudes as follows:

- i. Attraction to Life (AL): this is regulated by a person's sense of security in interpersonal relationships and self-esteem, in addition to their assets, and ways of coping and adjusting. This is what prevents self-destruction. AL comprises seven of the total 30 items, for example: *I feel that close people make me feel good; I enjoy many things in life.* High scores on AL reflect lower suicidal tendencies. Such individuals display strong ego strength and are secure in their interpersonal relationships (Orbach et al., 1991).
- ii. Repulsion by Life (RL): this attitude reflects the pain, suffering and unresolved problems that an individual experiences, and is the force that propels them toward self-destruction. RL comprises six of the total 30 items, for example: *I feel that I am not important to my family; Sometimes I feel that my problems can't be solved.*
- iii. Attraction to Death (AD): adolescents tend to romanticize death, regarding it as a superior, mystical and preferable state that provides protection, strength, peacefulness and restfulness. These fantasies increase the attraction to death thereby motivating self-destruction. AD comprises seven of the total 30 items, for example: *Death can change things for the better; Many problems can be solved by death only.*

- iv. Repulsion by Death (RD): this attitude deters self-destruction, as it is the frightening belief that death is an irreversible, annihilation of life. There is also an expectation of severe punishment after death. RD comprises nine of the total 30 items, for example: *I fear the idea that there is no return from death; I am afraid of death because my body will rot* (Orbach et al., 1991). Individuals who score high on RD are also less likely to report with high suicidal tendencies.

The MAST subscales are scored independently and have an internal consistency of .76 to .83 for the different subscales, with the entire scale having internal consistency of .92 (Orbach, Mikulincer, Gilboa-Schechtman & Sirota, 2003). For this reason, the MAST has been widely used in research studies investigating suicidal behaviour among adolescents. The MAST has also been used in South African studies (e.g., Murray, 2008; Ramgoon et al., 2006). Ramgoon et al. (2006) reported the alpha coefficients to be 0.68 (AL); 0.51 (RL); 0.80 (RD); and 0.64 (AD).

A South African study by Peltzer, Cherian and Cherian (2000) found the MAST to have internal consistency and split half reliability coefficient of 0.7.

4.3.2.2. The Measures of Psychosocial Development (MPD; Hawley, 1988).

The MPD is based on Erikson's (1968) Psychosocial theory of ego development. It is a self-report instrument that contains 112 self-descriptive Likert-type statements that altogether make up 27 scales: eight positive, eight negative and eight resolution scales, with 3 subscale scores (Zaporozan, 1999). This is a self-administered instrument that is norm based for use with adolescents and adults. The present study

made use of the *Identity* (R5) and *Intimacy* (R6) Resolution subscales (see Appendix D).

Identity resolution reflects issues around one's personal philosophy, work, and beliefs. The psychosocial conflict between *Identity* and *Role Confusion* comprises 14 of the total 28 items, for example: *Have worked out my basic beliefs about such matters as occupation, sex, family, politics, religion, etc.*; *Not sure of my basic convictions.*

Intimacy resolution refers to the degree to which the young adult has established healthy interpersonal relationships, more especially with a romantic partner. This psychosocial conflict consists of 14 items out of the total 28, for example: *Comfortable in close relationships*; *Emotionally distant.*

The test-retest reliabilities for all the scales on the MPD range from .67 to .80 (Zaporozan, 1999). Specifically for the R5 and R6 scales, test-retest reliabilities have been established to be in the ranges of .73 to .91 and .70 to .76 respectively. The scales consist of self-descriptive items with responses that range from A, “*not at all like you*” to E, “*very much like you*”.

4.3.2.3. Brief COPE (Carver, Scheier & Weintraub, 1989).

The Brief COPE (see Appendix E) is an abbreviated version of the COPE inventory (Carver, 1997). It is a theoretically based coping assessment that contains 28 items that measure avoidant and active coping styles. This 4-point Likert Scale allows participants to choose from responses ranging from 1, “*I haven't been doing this at all*” to 4, “*I've been doing this a lot*”. The Brief COPE consists of 14 scales. Rohland (1998) suggests the following 4 subscales for the Brief COPE:

- i. *Problem-focused coping* (PFC) consists of items such as active coping, planning, and use of instrumental support. PFC makes up six items out of the total 28 items. Statements measuring PFC include: *I've been concentrating my efforts on doing something about the situation I'm in* (active coping); *I've been trying to get advice or help from other people about what to do* (use of instrumental support).
- ii. *Emotion-focused coping* (EFC) has items such as use of emotional support, positive reframing, and religion. EFC comprises six of the 28 items. Items on EFC include: *I've been getting emotional support from others* (use of emotional support); *I've been trying to find comfort in my religion or spiritual beliefs* (religion).
- iii. *Adaptive coping* (AC) mechanisms include humour and acceptance. There are four items measuring AC, for example: *I've been accepting the reality of the fact that it has happened* (acceptance); *I've been making fun of the situation* (humour).
- iv. *Maladaptive coping* (MC) includes items such as venting, behavioural disengagement, mental disengagement (self-distraction), self-blame, substance use, and denial. MC comprises four items, including: *I've been giving up trying to deal with it* (behavioural disengagement); *I've been blaming myself for things that happened* (self-blame).

The COPE Inventory was designed to measure both situational and dispositional responses to stressors (Carver, 1997). In other words, participants are not

presented with a specific situation but are asked what they would generally do during, or after, a stressful event.

The COPE Inventory has been found to have fair to good psychometric properties. Test-retest reliabilities range from .46 to .86 and alpha values range from .45 to .92 (Carver et al., 1989). It also has convergent and discriminant validity with personality constructs such as self-esteem, trait anxiety, hardiness and optimism (Carver et al., 1989). Correlations between the scales are also low. This implies that it is possible to use the COPE to study the effects of different coping styles independently of each other.

4.3.3. Procedure

Participants were accessed from the University of KwaZulu-Natal with prior permission from the Ethical Committee, through ethical clearance, as well as the Head of Department of the School of Psychology. Prior to commencing the study, participants were made aware of the voluntary nature of the study, the details of the researcher, and given the opportunity to decline from participating in the study without penalty. Other ethical issues (discussed below) were reiterated with them. All participants were asked to read and voluntarily sign a consent form (see Appendix A). The questionnaires were then administered by the author who was present throughout the process.

4.3.4. Ethical considerations

Given the sensitive nature of the research topic, and therefore the content of some of the response items in the questionnaire booklet, certain ethical considerations were implemented. Participants were assured that strict anonymity and confidentiality

procedures would be carried out concerning the handling of the data. Participants were not required to divulge their names or contact details on the questionnaire booklet. Participants were only identified by race, gender and age for the purposes of statistical analysis. The researcher also reiterated the voluntary nature of the study, and the prerogative of any participant to withdraw from the study at any time without penalty.

Participants were not paid in monetary or other form as incentives to partake in this study. Their choice to do so was with the explicit understanding that no incentives were to be offered. Participants were welcome to contact the researcher to enquire about the outcomes of the study and the researcher's contact details were made available upon request. In the likelihood that participants experienced any distress, referrals to the Student Counselling Centre were planned. However none of the students requested the service.

4.3.5. Data analysis

The data was analyzed using the Statistical Package for Social Sciences (SPSS). Particular attention was paid to the Pearson's Correlation Coefficient (r), in order to investigate whether correlations exist between scores on *identity* and *intimacy*. This allowed the researcher to confirm whether individuals who have resolved the crisis of *Identity vs. Role Confusion* had also resolved the crisis of *Intimacy vs. Isolation*. Correlations between the scores on these subscales as well as the subscales of the Brief COPE and MAST were also analyzed to determine the relationship between coping styles and suicidal tendencies.

CHAPTER FIVE

Results

5.1.Introduction

The main purpose of the study was to explore the developmental stage of young adults, *Intimacy vs. Isolation*, and its relationship to coping and suicidality. Statistical analysis was achieved using SPSS. The findings are presented as analyses of frequency, descriptive statistics (including means and standard deviations), one-way analysis of variance (ANOVA), and correlations. The internal consistency of the various scales was achieved by employing Cronbach's alpha internal consistency reliability. Internal consistency for the subscales ranged from $\alpha = 0.57$ to 0.82 which is fair to good consistency.

5.2.Frequencies

Table 1

Demographic Variables (N = 175)

	Frequency	Percent
Sex		
Males	34	19.4
Females	141	80.6
Age		
18	5	2.9
19	32	18.3
20	56	32.0
21	50	28.6
22	19	10.9
23	9	5.1
24	4	2.3
Race		
Black	59	23.4
White	41	33.7
Indian	66	37.7
Coloured	6	3.4
Other	3	1.7

The total sample size included in the analysis for this study was 175 (N=175). The youngest participant was 18 years old, and the oldest was 24. Participants older than 24 years old were excluded from this study in keeping with the developmental stage that this study is concerned with. Only participants who met Erikson's (1968)

proposed developmental cohort for the stages of *Identity* and *Intimacy* resolution were included. The largest represented age group was 20 year olds, with a total of 56 participants (32 %). The least represented age group was the 24 year old group, with only 4 participants (2.3%).

Both males and females were included in the final analysis. There were a total of 34 males (19.4%) and 141 females (80.6%).

There was diverse racial representation in this study, including White, Black, Indian and Coloured ethnic groups. The largest represented ethnic group was Indian, with a total of 66 participants (37.7%). The second highest was Blacks, with 59 participants (33.7%). Whites followed, with 41 participants (23.4%). There were 6 Coloured participants (3.4%) and 3 “Other” (1.7%).

5.3. One-way Analysis of variance

Table 2

Means, standard deviations and one-way ANOVA results by Race.

Black	White	Indian
(n = 59)	(n = 41)	(n = 66)

	<i>Mean (SD)</i>			<i>F</i>
AL	26.42(2.76)	25.38(3.64)	24.96(3.44)	1.822
RL	12.98(4.17)	13.00(4.06)	14.02(4.06)	1.448
AD	16.35(4.59)	16.76(3.58)	16.53(4.03)	.586
RD	21.14(7.36)	16.69(5.57)	16.36(5.54)	5.401*
Identity	5.58(9.35)	6.95(9.53)	5.77(8.51)	.727
Intimacy	8.90(9.79)	13.49(7.51)	10.14(9.09)	2.170
PFC	2.93(.68)	2.80(.72)	2.52(.65)	2.902*
EFC	2.97(.63)	2.74(.78)	2.51(.57)	4.085*
AC	2.56(.63)	2.63(.72)	2.38(.64)	1.153
MC	1.83(.44)	1.75(.47)	1.86(.60)	.669

Note: * 0.05

** 0.01

*** 0.001

A one-way ANOVA was conducted to test the hypothesis that sample means for the dependent variable, suicidal attitudes, identity and intimacy, and coping styles are the same for all levels of a factor, across all demographic groups. Two racial groups (Coloured and Other) were eliminated from the analysis because of their small cell sizes.

The findings indicated that race had a significant effect on only one of the suicidal attitudes, namely RD, $F(4, 174) = 5.401$. Post hoc analysis using Scheffe's criterion indicated that on closer examination, the difference in RD scores is significant between Whites, Blacks, and Indians ($X = 16.69$, $X = 21.14$ and $X = 16.36$ respectively). Blacks have higher RD scores, followed by Whites, and then Indians.

There was also a significant effect between PFC and race, $F(4, 174) = 1.363$. Post hoc analysis indicated that there is a significant difference between PFC scores for Blacks and Indians ($X = 2.93$ and $X = 2.52$ respectively). Blacks have slightly higher PFC scores than Indians.

Finally, there was also a significant effect for EFC and race, $F(4, 174) = 4.085$. Post hoc analysis showed that there is a significant difference between EFC scores for Blacks and Indians ($X = 2.97$ and $X = 2.51$ respectively). Blacks have slightly higher EFC scores than Indians.

5.4.Descriptive statistics

Table 3

Means, standard deviations, alpha and t values of gender differences

	Female (n=141)		Male (n=34)	
	<i>Mean (SD)</i>		<i>α</i>	<i>t</i>
	Female (n = 141)	Male (n = 34)		
AL	25.68(3.29)	25.13(3.45)	.71	-.853
RL	12.89(3.92)	16.13(3.89)	.67	4.329

AD	16.54(4.11)	16.99(3.82)	.65	.579
RD	17.94(6.51)	19.16(6.96)	.65	.965
Identity	6.31(9.14)	3.50(7.92)	.56	-1.649
Intimacy	10.82(9.22)	8.26(8.23)	.57	-1.477
PFC	2.76(0.69)	2.62(0.74)	.82	-1.046
EFC	2.78(0.65)	2.50(0.69)	.82	-2.303
AC	2.46(0.65)	2.69(0.73)	.82	1.850
MC	1.81(0.52)	1.94(0.51)	.82	1.356

No significant differences were found between males and females on the subscales measuring suicide, identity and intimacy, and coping.

5.5. Pearson correlation

Table 4

Correlations between MAST subscales, Identity, Intimacy, and COPE scales

	AL	RL	AD	RD	Identity	Intimacy	PFC	EFC	AC	MC
AL		-.465**	-.146	.016	.431**	.398**	.416**	.413**	.070	-.184*
RL			.326**	.035	-.558**	-.481**	-.362**	-.353**	-.021	.413**
AD				-.007	-.200**	-.213**	-.164*	-.042	-.020	.231**
RD					-.121	-.029	.152*	.070	.028	-.170*
Identity						.656**	.328**	.421**	.028	-.398**
Intimacy							.325**	.264**	.048	-.319**

PFC	.645**	.299**	-.016
EFC		.309**	-.018
AC			-.182*
MC			

Note: * p <0.05; **p<0.01

One of the first hypotheses in the study was that *Intimacy* resolution would be positively correlated with AC and negatively correlated with MC. It was found that identity and intimacy are both positively correlated with PFC and EFC, but negatively correlated with MC. There was no significant relationship between identity and intimacy and AC. The results suggest that *Intimacy* resolution is not related to the use of adaptive coping styles.

Secondly it was hypothesised that *Intimacy* resolution would be positively correlated with AL and RD and negatively correlated with AD and RL. The results show that there is a significant positive correlation between identity, intimacy and AL, consistent with the hypothesis, suggesting that individuals with high *Identity* and *Intimacy* resolution are likely to be more attracted to life. Both AD and RL were significantly negatively correlated with identity and intimacy scores. This suggests that individuals with high identity and intimacy scores are less likely to report with AD and RL attitudes.

It was also hypothesised that AC would be positively correlated with AL and RD as well as negatively correlated with AD and RL. There were no significant relationships between this coping style and any of the suicidal attitudes.

Finally it was hypothesised that MC would be positively correlated with AD and RL and negatively correlated with AL and RD. The results showed that MC was

significantly positively correlated with AD and RL, as well as negatively correlated with AL and RD. This suggests that the use of MC appears to be related to higher suicidal tendencies.

PFC was significantly positively correlated with both AL and RD, and negatively correlated with RL and AD. This suggests that PFC is related to low suicidal attitudes. EFC was positively correlated with AL and negatively correlated with RL. There was no relationship between AD and RD and EFC. The results suggest that individuals who make use of both PFC and EFC are more likely to report with high attraction to life.

CHAPTER SIX

Discussion

6.1.Introduction

This study investigated the relationship among *Intimacy* resolution, coping styles and suicide in young adults, hypothesising that *Intimacy* resolution would be related to adaptive coping styles, and lower suicidal tendencies. The results of this study were presented in Chapter 5. What follows is a discussion of what these findings mean in light of psychological theory, and the implications, at least tentatively, of such findings for future intervention strategies.

6.2.Alpha values for the MAST, MPD, and Brief COPE

Cronbach's alpha values for the MAST subscales in this study were found to be moderate at 0.71, 0.67, 0.65, and 0.65 for AL, RL, AD, and RD respectively. Orbach et al. (1991) found higher alpha values in their study (0.83, 0.76, 0.76, and 0.83 respectively). The study by Ramgoon et al. (2006) investigating suicidal attitudes in a South African sample found alpha values of 0.68 (AL), 0.51 (RL), 0.80 (AD), and 0.64 (RD) for the four subscales. The present study found higher values for AL and RL with a slightly higher value for RD. Another South African study by Murray (2008) reported inter-item consistency of 0.71 (AL), 0.71 (RL), 0.57 (AD) and 0.90 (RD) respectively.

The low alpha values in this study indicate that perhaps the scale may not be consistently measuring suicidal attitudes as intended. Other authors (e.g., Osman, Barrios, Gritman & Osman, 1993; Ramgoon et al., 2006), speak to the heterogeneous nature of the AD subscale in measuring attitudes towards life after death as opposed to attraction to death. For example the item, *'I know people who have died and I*

believe I will meet them when I die', may have been endorsed by participants responding more to their feelings around life after death as opposed to an actual attraction to death or to the religious belief that when you die you meet people who have gone before you.

The use of the identity and intimacy scales of the MPD in previous research has found alpha values ranging from 0.65 to 0.84 for the positive scales, and 0.69 to 0.83 for the negative scales (Hawley, 1988). The identity and intimacy scales both indicated high alpha values, with values ranging from 0.73 to 0.84 for the positive scales, and 0.70 to 0.83 for the negative scales (Hawley, 1988).

The author could find no studies making use of the MPD in a South African context. The low alpha values in this study, consistent with this finding, suggest the need for further research in this area.

This study found high alpha values for all four subscales of the Brief COPE (0.82%). This suggests high validity for its use on a South African population. However, in a review of the use of the COPE / Brief COPE in South African studies, no studies were found to have made use of either of these scales. Only one study by Mundell (2006) used an adapted version of the Brief COPE in measuring positive and negative coping skills of HIV positive women. This adapted version was found to have a Cronbach's alpha reliability co-efficient of 0.83, with positive coping having a reliability co-efficient of 0.75 and negative coping with a reliability of 0.54. The entire adapted coping scale was found to have a reliability of 0.62 (Mundell, 2006).

6.3. Demographic variables, suicidal attitudes, intimacy, and coping styles

The finding of no significant gender differences in suicidal attitudes is not entirely consistent with that of previous research. Empirical literature on suicide has in many

cases shown that suicidal behaviour is gendered (Dransart, 2009; Hawton, 2000). Globally, many studies on suicide have shown that males have consistently higher rates than females, with some exceptions, for example China, which has been found to have higher rates amongst women (Cheng & Lee, 2000).

Internationally, research conducted by the National Adolescent Health Information Center in 2006, found that adolescent and young adult males between the ages of 10 and 24 years had higher suicide rates than their female counterparts, averaging 5 times more than females in the same population group, acknowledging this as a long-standing trend from 1981 to 2003.

Other studies (e.g., Wasserman, Qi Cheng & Guo-Xin Jiang, 2005), analyzing global suicide rates in adolescents between the ages of 15 and 19 years from the period of 1965 to 2005 in 90 countries, found that although males had higher rates of suicide than females, there was only a small difference in ratio (9,5%: 8,2% respectively).

A few studies both internationally and within in a South African context have investigated suicidal attitudes (e.g., Domino, MacGregor & Hannan, 1989; Peltzer et al., 2000; Stein, Brom, Elizur & Witztum, 1998). Ramgoon et al. (2006) also used the MAST in investigating suicidal tendencies among adolescents, and found significant gender differences in suicidal attitudes. They found that adolescent females had higher AD scores than males. The authors however make reference to Osman et al. (1994) who speak to the possible heterogeneous nature of the content of this scale in addressing issues such as religion and after-death beliefs rather than actual suicidal attitudes.

The finding of no significant gender differences in this study is consistent with that of a more recent South African study that used the MAST and also investigated

religious beliefs (Kazi, 2009). Beautrais et al. (2003) also reported no variations in suicidal attitudes between the genders and also found that where participants held more liberal suicidal attitudes, this was related to other variables such as family history and personal experiences with suicide.

One other possible explanation to account for the findings in this study is that some of the commonly identified risk factors in suicide such as socioeconomic status, psychopathology, substance use and help-seeking behaviours are becoming less stereotypical of young adult men and women. The sample of students used in this study was university students who are perhaps less likely to conform to traditional gendered norms than their less educated counterparts. Male students are possibly just as likely to access treatment as female students are likely to use substances. Research also indicates that the prevalence of psychopathology in general (which is linked to suicidal behaviour) amongst males and females is roughly equal (Aneschensel, Rutter & Lachenbruch, 1991), which may help to explain the finding.

In this study there were also no significant gender difference found for coping. This finding is inconsistent with that of Carver et al. (1989), who developed the COPE inventory and found statistically significant gender differences in the use of certain coping strategies. They found, for example, that females tended to seek support and vent their emotions more for both instrumental and emotional reasons. Other research that has investigated differences in how males and females cope with different stressors, has also found some significant and empirically supported differences between the sexes. A study by Hobfoll, Dunahoo, Ben-Porath and Monnier (2006), examining a dual-axis model of coping, i.e. looking at active vs. inactive and prosocial vs. antisocial coping styles, found that females engaged in more prosocial coping mechanisms than males, who adopted more aggressive and antisocial

coping styles. However both prosocial and antisocial coping was associated with high emotional distress. Active coping was associated with lower distress.

Rumination as a coping style has been found to be mostly associated with increased levels of depression in both adolescent girls and adult women (Morrow & Nolen-Hoeksema, 1990), as compared to boys and adult men. A study by Nolen-Hoeksema, Larson and Grayson (1999), found that females tend to engage more in ruminative thinking over problems or negative events and tend to blame themselves more than males who deal with difficult situations through distraction or disengagement.

Some studies however have found no gender differences with regards to coping (e.g., Hamilton & Fagot, 1998). To understand the relationship between gender and coping styles, studies have drawn on socialization and traditional vs. non-traditional gender role theories (e.g., Lengua & Stormshak, 2000; Matud, 2004). According to this explanation, individuals who prescribe to certain traditional gender roles are more likely to adopt socially constructed “masculine or feminine” coping mechanisms in the face of a stressor (Day & Livingstone, 2003). Some research has shown that emotion-focused styles such as the use of emotional support are regarded as more feminine, whereas problem-focused styles such as planning are closely linked to masculine traits. On the other hand individuals who identify with non-traditional gender roles are more likely to make use of either coping styles that are not consistent with their gender, or use a combination of both styles, irrespective of its gendered nature (e.g., Lengua & Stormshak, 2000; Matud, 2004).

Bennett, Gouws, Kritzinger, Hames and Tidimane (2007) analyse the role of gender in institutional spaces in reference to issues such as sexual harassment and sexual violence. They generally speak of the post colonial objective of the

“feminisation of the African man” as a “gendered challenge” particularly within the context of higher education institutions. They go on to explain how the benefit of this will be a deconstruction of social concepts such as “manhood” and “femalehood”, which translates to a change in the behaviours of men and women, allowing both sexes to draw from each other in terms of mannerisms, attitudes, and even coping styles in the face of stressors. Therefore young educated females are just as likely to make use of what are popularly regarded as “masculine” coping strategies such as PFC and distraction, and men are less embarrassed by using emotion-focused ways of coping.

In the context of empirical literature which has consistently shown that certain coping styles elevate one’s risk towards depression (Li, DiGiuseppe & Froh, 2006), and the above argument that coping behaviour is becoming less gendered, the findings in this study can be explained within this context. If females are making equal use of certain coping strategies as compared to their male counterparts, their tendency to report with suicidal attitudes will be neither more nor less than males, as was found in this study.

In this study, the post hoc analysis found a significant relationship between race and RD, where Blacks were found to have the highest RD scores, followed by Coloureds, Whites, and Indians. RD represents the attitude of being repulsed by the idea of death. A study by Murray (2008) using the MAST also found that Blacks had the highest RD scores amongst the different race groups. These findings however contradict that of past research where Blacks have been reported as being one of the highest ‘at-risk’ demographic groups for a range of suicidal behaviours (Schlebusch, 2005). One study of completed suicides found that demographically, 43% were Black; 38% were White; 16% Coloured; and 2% were Indian (Horner & Fredericks, 2005).

A lot has been written about race and suicide in the literature (e.g., Laubscher, 2003; Meel, 2003a). Race in South Africa is an important variable in understanding some important psychological dynamics. Studies that have attempted to explain racial differences have done so within the context of the different cultural and socio-political challenges that different race groups in South Africa face (Meehan, Peirson & Fridjhon, 2007). Factors such as urbanisation, stress and poverty (Meel, 2003a; Schlebusch, 2004) have been cited as reasons for the higher suicidal risk amongst Black people. According to Booysen (2009), this race group faces an ever changing political and social climate that has gone from racial segregation and inequality to democracy and a so called 'Africanisation' of South Africa. The latter, with its unfulfilled promises of prosperity and affirmation, has instead resulted in feelings of hopelessness, disillusionment and apathy, which has made Black people more susceptible to a range of suicidal behaviours (MacGregor, 2000).

A differing view by Memela (2008) is that Whites are now feeling like the marginalised population in the current democratic climate. Their sense of stability, security and confidence is threatened, and with it comes a sense of hopelessness that makes them vulnerable to a range of psychological difficulties, amongst them, suicide. Blacks on the other hand have a renewed sense of hope for their future and are benefiting from South Africa's new economic policies (e.g. affirmative action) and political climate (Serote, 2007). Black students at university in particular are given the opportunity of participating in this changing economic environment that promises them the same wealth as their racial predecessors. This opportunity for equal participation and benefit is likely to increase their sense of self-esteem and self-efficacy which may have the effect of decreasing their vulnerability and susceptibility

to suicidal behaviour. This may explain the finding of low RD amongst Black students in this study.

The findings also indicate that Black students make more use of PFC than their Indian counterparts. The author of this study could find limited research investigating the relationship between race and coping (e.g., Armstrong, 2008; Lopez, Zhang & Lopez, 2008; Parmar, 2001). This is surprising given the significant psychosocial disparities and challenges that different race groups face. Of the limited studies found, the results were not always consistent. The study by Armstrong (2008) found that the use of PFC was associated with lowered depressive symptoms in young Black women. Parmar (2001) found no significant relationship between different coping strategies and race in a sample of Black parents. The one study that found contradictory results to that of this study was that of DeCoster and Cummings (2004) who found Whites to have higher PFC scores than Blacks.

PFC makes use of strategies that constructively take action towards solving a problematic stressor (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986). This is likely to result in positive outcomes that enhance the psychological well-being of an individual and leads to more positive contemplation of the future. The positive correlation between PFC and AL and RD for Black participants in our study suggests that PFC is a protective factor against negative suicidal attitudes for them.

6.4. Identity and intimacy

It was hypothesised that *Identity* resolution is positively correlated with *Intimacy* resolution. In other words, the individual's capacity to resolve the developmental task of *Identity vs. Role Confusion*, is associated with his/her capacity to resolve the psychosocial crisis of *Intimacy vs. Isolation*. The hypothesis was confirmed and these

findings are consistent with numerous studies that have investigated and found correlations between identity and intimacy (e.g., Bartle-Haring & Strimple, 1996; Buckler, 2005; Kacerguis & Adams, 1980), all echoing the position that *Identity* is an integral component of *Intimacy* resolution.

Literature has shown that *Identity* resolution and *Intimacy* resolution are inseparable (Huang, 2006). *Intimacy* resolution is not a function of healthy development on its own, but is influenced strongly by the ability to obtain and negotiate a secure identity and a stable sense of self (measured in this study by a strong self-concept, adequate self-understanding, and having worked out one's beliefs about sex, family and work). The findings in this study support this important theoretical formulation.

The findings suggest that *Intimacy* resolution is not just about the capacity to secure healthy relationships, but also speaks to the ability to retain a sense of self and a secure, unshakeable autonomy that is independent of others, but capable of engaging with others. It is therefore expected that successful *Intimacy* resolution would be a buffer to psychological stress. Research on interpersonal relatedness has found that a sense of connection and belongingness to others predicts healthy psychological adjustment and life satisfaction (Stepp et al., 2008).

6.5. Intimacy and suicidal attitudes

One of the main objectives of this study was to investigate the relationship between suicide and interpersonal intimacy, i.e. whether the capacity to resolve intimacy issues is associated with suicidal tendencies. The literature on this subject, whilst limited, suggests that healthy interpersonal relationships are an important developmental

context for the growing adult and predict healthy psychological adjustment (e.g., Stepp et al., 2008).

In this study, intimacy was found to be positively correlated with AL, and negatively correlated with RL and AD. These findings support the hypothesis that *Intimacy* resolution is related to positive attitudes towards life and negative attitudes towards death. Other empirical research has also found the role of interpersonal relatedness to be an important mediator of suicidal behaviour (Van Orden et al., 2008). Individuals who have high levels of intimacy are firstly less likely to report with suicidal tendencies as they are fulfilled by their interpersonal relationships, and secondly are more likely to have adequate social support resources in times of stress.

According to Leenaars, Wenckstern, Sakinofsky, Dyck, Kral and Bland (1998), individuals often report with suicidal tendencies as a response to their frustrated interpersonal needs. Using an object relations approach that places a lot of emphasis on interpersonal relations in predicting psychological well-being, they argue that the suicidal person struggles with creating and maintaining healthy attachments, and for such individuals who lack sufficient separateness and cannot distinguish self from the other, self-destructive behaviours such as suicide are often contemplated.

6.6. Intimacy and coping styles

One of the hypotheses guiding this study was that *Intimacy* resolution is positively correlated with AC, and negatively correlated with MC. Whilst no significant relationship was found between intimacy and AC, the former was found to be positively correlated with PFC and EFC, and negatively correlated with MC. This is consistent with psychological theory that shows that individuals who are intimacy-mature are also better balanced in terms of securing and maintaining quality

relationships, effective conflict management and accessing emotional support (Levy-Tossman, Kaplan & Assor, 2006). Intimacy involves openness, validation, mutual consideration and perspective-taking that allows each individual to express issues in a manner that is respectful and considerate of the other's feelings (Savin-Williams & Brendt, 1990; Zarabatany, Conley & Pepper, 2004). In contrast, individuals who are not in relationships characterized by this level of intimacy are more prone to loneliness, aggression, depression, isolation and maladaptive coping styles (Hussong, 2000; Parker & Asher, 1987).

Literature on coping styles has consistently found that the manner in which people cope with difficulties or stressors can predict their overall ability to deal with that stressor (Lazarus & Folkman, 1984). The use of healthy and adaptive coping strategies such as humour, the use of social support and problem-solving promote one's well-being, whereas maladaptive strategies such as denial, substance use and withdrawal make one susceptible to greater psychological turmoil.

A study by Legkaia (2008) found that females reported with higher avoidance coping when their intimacy scores were low whereas women with high intimacy scores adopted more problem-solving coping strategies. This finding is consistent with the results of the present study. This therefore suggests that intimacy-mature individuals adopt more constructive problem-solving strategies in the face of a stressor than individuals who are intimacy-immature.

Attachment styles are a commonly researched area of study in terms of understanding various health-seeking behaviours in adults and children (Arend, Gove & Sroufe, 1979; Collins & Read, 1990; Feeney & Noller, 1990; Levy & Davis, 1988; Main, Kaplan & Cassidy, 1985; Sroufe, 1983; Mikulincer & Erev, 1991; Mikulincer & Nachshon, 1991). It has been shown that attachment styles such as anxious or

avoidant are closely associated with problems in emotional adjustment (Mikulincer, Florian & Weller, 1998). The authors addressed more specifically the relationship between attachment styles and coping with posttraumatic adjustment, hypothesizing that secure persons would make use of more problem-focused and social support coping mechanisms than insecure persons. They found that secure individuals made more use of support-seeking strategies, ambivalent individuals relied more on EFC, and finally that avoidant individuals made use of distancing as a coping strategy.

6.7.Coping and suicidal attitudes

The relationship between coping styles and suicidality was explored. It was found that PFC was positively correlated with AL and RD. Both these attitudes are an indication of low suicidal tendencies. PFC was also negatively correlated with RL and AD, indications of higher suicidal tendencies.

The role of coping styles in suicidality is an empirically rich area of study (Horesh et al., 2007; Josepho & Plutchik, 1994). Research has consistently showed that healthy coping strategies act as buffers against suicidal behaviour. This study hypothesised that intimacy-mature individuals are more likely to adopt these healthy coping styles and that as a result they report lower suicidal tendencies.

The findings in this study suggest that PFC, whilst largely context dependent and situation-specific, as explained by the authors who created the scale (Carver et al., 1989), is an adaptive coping strategy that seems to play some role in mediating suicidality. The results are supported by a study by Chapman, Specht and Cellucci (2005), which found that PFC was negatively associated with suicide attempts. Another study showed that the use of PFC reduces the tendency that some individuals have to report with suicidal attitudes (Ades, De Man, Lauer & Marquez, 2008).

PFC deals directly with the cause of the problem and attempts to resolve a stressor through problem-solving or trying to alter the source of the stressor (Carver, Scheier & Weintraub, 1989). It includes planning, taking action or seeking assistance, and is often associated with healthy outcomes with regards to managing a stressor.

EFC was found to be positively correlated with AL, and negatively correlated with RL. This suggests that EFC can act as a buffer against suicidal tendencies. Research has found it to be an adaptive form of coping in that it involves the venting of one's feelings about a stressor and is an important aspect of mood regulation (Lazarus & Folkman, 1984).

Finally MC was expectedly negatively correlated with AL, and positively correlated with RL and AD. Accordingly, individuals who make use of MC, have a higher propensity to report with suicidal attitudes. These findings are consistent with literature, which highlights how the tendency to use denial, disengagement, self-blame and substance use, which are forms of MC, put one at risk for poorer psychological functioning. A recent study found that adolescent suicide attempters more frequently made use of withdrawal as a coping strategy than non-suicidal adolescents (Spirito, Overholser & Stark, 1989). This may be indicative of the gradual withdrawing from family and the world that adolescents who plan to take their lives make.

CHAPTER SEVEN

Summary

7.1.Introduction

The aim of this study was to explore the relationship between coping as a mediating factor of suicidal risk in young adults currently facing the psychosocial crisis of *Intimacy vs. Isolation*. Literature in the area of suicide is expansive and much theoretical as well as empirical work has been conducted in addressing issues that lead to and maintain the high rates of suicidal behaviour.

A review of the determinants of suicide has shown that factors such as depression, self-esteem, interpersonal relationships and coping styles are amongst the most commonly highlighted in empirical research. Interpersonal relatedness encompasses a range of social mechanisms including but not limited to family, friends, intimate relationships and community. Much research has been conducted in this area, largely showing the ameliorative effects of the quality of one's social support.

In the South African context, suicide research is slowly but steadily growing and an increasingly reliable database of statistics is playing a key role in informing our understanding of suicide in a context that has its own interplay of complex racial, social, political and cultural dynamics. South Africa has one of the highest suicide rates worldwide, and the 15 to 24 year age group is consistently identified as one the most 'at-risk' groups for suicide and other health risk behaviours.

Erikson's (1968) concept of *Intimacy vs. Isolation* has received very little empirical attention in the area of suicide. Yet recent studies have shown the possible protective effect of stable secure intimate relationships for young adults against suicidal behaviour (Van Orden et al., 2008). Understanding risk behaviours of the

young adult demands an appreciation of the life tasks that these individuals face, the establishment of healthy interpersonal relationships being fundamental to this understanding.

The results of this study were to some extent consistent with other research on the relationship among coping and suicide, intimacy and suicide, as well as between race and suicide. Blacks showed higher RD scores than Whites and Indians. They were also found to have higher PFC scores than Indians, suggesting a buffering effect of problem-focused coping styles against suicidal behaviour for this group. Pearson correlations showed that there were significant relationships between *Intimacy* resolution and AL. These results suggest that intimacy-mature individuals are more likely to adopt adaptive coping styles and feel more positive about life.

PFC and EFC styles were also significantly positively correlated with AL, whilst MC was significantly negatively correlated with AL.

Certain findings were however not supported, for example, the relationship between gender and any of the variables measured. This is not consistent with many empirical studies that have shown gender to have a significant effect on suicide (e.g., Dransart, 2009; Ramgoon et al., 2006).

The results from this study are promising and add to the growing database in the area of suicidology, and speak to the need for more empirical research within South Africa's diverse context.

CHAPTER EIGHT

Limitations, Conclusion and Recommendations

8.1. Limitations

This study was experimental in its design. The manner in which it was conducted methodologically, whilst confirmatory by other research, may also be potentially limiting. Some might argue that issues around suicide and even interpersonal intimacy lend themselves to more qualitative and in-depth exploration. Studies that wish to investigate suicidal tendencies in this population group need to do so cognizant of the fact that in-depth interviews can provide rich data in terms of understanding and intervening in the area of suicide.

The manner in which the sample was collected, through convenience sampling, has its limitations. The researcher made use of a sample of 2nd and 3rd year psychology students, and this could have possibly introduced bias in terms of how the students responded to the items in the questionnaires. Psychology students have a greater understanding of psychological constructs and survey research and may have responded in line with this understanding. This suggests that further research in this area may benefit from making use of a different cohort of students, through other kinds of sampling methods. The use of a sample of university students however is advantageous in that this group is most likely grappling with the issues around psychosocial development that this study is concerned with.

There are also some reliability and validity issues that need to be carefully highlighted here. The use of the scales, whilst popular in most international studies, presented some issues for consideration within a South African context. More specifically, the use of the MAST and the MPD. The MAST has been used in adolescent samples in a South African context. However, in a preliminary validation

of the MAST on a South African sample of adolescents, Ramgoon, Patel & Paruk (2009) point to the need for the scale to be inclusive of more culturally relevant items, to ensure its relevance in a South African context, especially amongst non-White populations. Its use on such a population introduces the problem of language bias where adolescents who are not first language speakers of English may struggle with the comprehension of some of the questions. Also, the authors argue that the items may have been interpreted from a different cultural perspective than the original Jewish sample that the scale was validated on.

The MPD has been used far less frequently, if at all, in a South African context. Whilst its psychological constructs are important and appropriate for our context, namely issues around adolescent *Identity* development and *Intimacy* resolution, the scale should be validated in our context to ensure its appropriateness on our diverse population.

Bearing in mind these limitations, it is recommended that future research takes cognizance of some of these restrictions of quantitative research when investigating social phenomena such as suicide, coping and interpersonal relatedness. There exists a need for research that can reflect the lived experience of participants told in their own words. The design of this study is nevertheless valuable in that it points to the statistical validity of exploring some of these variables more in-depth.

8.2. Conclusion and Recommendations

This study offers substantive empirical motivation for future research endeavours in a South African context aimed at investigating some of the salient determining factors of suicidality amongst young adults. The findings are mostly in line with that of previous research, suggesting that regardless of the unique cultural and sociopolitical

context South African students live in, they experience the same developmental struggles and most respond similarly to their world wide counterparts. Issues around race and these variables however, still do lend themselves to further socio-political dialogue that may be explored in future research. The findings of this study speak to the need for preventative and interventionist efforts that aim to understand and reduce the incidence of suicide in young adults. It is apparent from this study and other research that the achievement of interpersonal intimacy is an important task in the growing adult, and mediates both coping styles and suicidal behaviour. Coping styles, in their varying forms, are universally shared mechanisms aimed at survival and relief from stress. Future research endeavors should therefore continue to explore how and why the choice of coping styles may contribute to act as a buffer against suicidal behaviour.

This research will hopefully inform life orientation programmes at schools that aim to teach students the life-skills needed to help them reach intimacy maturity and adopt coping mechanisms that enhance their psychological well-being when confronted with life stressors.

REFERENCES

- Adelson, J. (Ed.). (1980). *Handbook of adolescent psychology*. New York: Wiley.
- Ades, J., De Man, A.F., Lauer, S., & Marquez, S. (2008, December). External locus of control, problem-focused coping, and attempted suicide. *North American Journal of Psychology*. Retrieved from http://findarticles.com/p/articles/mi_6894/is_3_10/ai_n31187287.
- Ainsworth, M.D.S. (1969). Object relations, dependency, and attachment: A theoretical review of the infant-mother relationship. *Child Development, 40*, 969-1025.
- Ainsworth, M.D.S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*, 333-341.
- Aneschensel, C., Rutter, C.M., & Lachenbruch, P.A. (1991). Social structure, stress, and mental health: Competing conceptual and analytical models. *American Sociological Review, 56*, 166-178.
- Anshel, M.H., Sutarso, T., & Jubenville, C. (2009). Racial and gender differences on sources of acute stress and coping style among competitive athletes. *The Journal of Social Psychology, 149*, 159-178.
- Arend, R., Gove, F.L., & Sroufe, L.A. (1979). Continuity of individual adaptation from infancy to kindergarten: A predictive study of ego-resiliency and curiosity in preschoolers. *Child Development, 50*, 950-959.
- Armstrong, N.O. (2008, July). *Discrimination and the mental health of young African American adults: The role of coping resources and behaviors*. Paper presented at the annual meeting of the American Sociological Association Annual Meeting, Sheraton Boston and the Boston Marriott Copley Place,

Boston, MA. Retrieved from

http://www.allacademic.com/meta/p242213_index.html

Arnett, J.J. (1999). Adolescent storm and stress, reconsidered. *American Psychologist*, *54*, 317-326.

Bartle-Haring, S., & Strimple, R.E. (1996). Association of identity and intimacy: An exploration of gender and sex-role orientation. *Psychological Reports*, *79*, 1255-1264.

Baumeister, R.F., & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497-529.

Baumeister, R.F., Campbell, J.D., Krueger, J.I., & Vohs, K.D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness or healthier lifestyles? *Psychological Science*, *4*, 1-44.

Baumrind, D. (1991). The influence of parenting styles on adolescent competence and substance use. *Journal of Early Adolescence*, *11*, 56-95.

Beautrais, A.L., Horwood, J.L., & Fergusson, D.M. (2003). Knowledge and attitudes about suicide in 25-year-olds. *Australia and New Zealand Journal of Psychiatry*, *38*, 260-265.

Bennett, J., Gouws, A., Kritzing, A., Hames, M., & Tidimane, C. (2007). Gender is over: Researching the implementation of sexual harassment policies in Southern African higher education. *Feminist African*, *11*, 83-104.

Bertolote, J.M., & Fleischmann, A. (2002). A global perspective in the epidemiology of suicide, *Suicidologi*, *7*, 6-8.

Booyesen, H. (2009, September). South Africa and its anti-white legislative structure.

Retrieved from <http://globalpolitician.com/print.asp?id=5903>.

- Borowsky, I.W., Ireland, M., & Resnick, M.D. (2001). Adolescent suicide attempts: Risk factors and protectors. *Pediatrics*, *107*, 485-493.
- Bosma, H., & Jackson, S. (1990). *Coping and self- concept in adolescence*. New York: Springer-Verlag.
- Bridge, J.A., Goldstein, T.R., & Brent, D.A. (2006). Adolescent suicide and suicidal behavior. *Journal of Child Psychology and Psychiatry*, *47*, 372-394.
- Broderick, P.C., & Korteland, C. (2002). Coping style and depression in early adolescence: Relationships to gender, gender role, and implicit beliefs. *Sex Roles*, *46*, 201-213.
- Brown, S.P., Westbrook, R.A., & Challagalla, G. (2005). Good cope, bad cope: Adaptive and maladaptive coping strategies following a critical negative work event. *Journal of Applied Psychology*, *90*, 792-798.
- Buckler, L.M. (2005). Gender differences in identity and intimacy development. Retrieved from <http://www.uoguelph.ca/~gadams/Theses/Buckler-Identity-and-Intimacy.pdf>.
- Burrows, S. (2005). *Suicide mortality in the South African context: Exploring the role of social status and environmental circumstances*. PhD thesis. Karolinska Institutet
- Burrows, S., & Laflamme, L. (2006). Suicide mortality in South Africa: A city-level comparison across socio-demographic groups. *Social Psychiatry and Psychiatric Epidemiology*, *41*, 108-114.
- Burrows S., Vaez, M., Butchart, A., & Laflamme, L. (2003). The share of suicide in injury deaths in the South African context: sociodemographic distribution. *Public Health*, *117*, 3-10.

- Cantor, C.H. (2000). Suicide in the Western world. In K. Hawton, and K. Van Heeringen (Eds.), *The international handbook of suicide and attempted suicide* (pp. 9-28). New York: John Wiley & Sons Ltd.
- Cardillo, M. (1998). *Intimate Relationships: Personality development through interaction during early life*. Retrieved from <http://www.personalityresearch.org/papers/cardillo.html>.
- Carducci, B.J. (1998). *The psychology of personality*. USA: Brooks/Cole Publishing Company.
- Carver, C.S. (1997). You want to measure coping but your protocol's too long: Consider the brief COPE. *International Journal of Behavioral Medicine*, 4, 92-100.
- Carver, C.S., Scheier, M.F., & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267-283.
- Chapman, A.L., Specht, M.W., & Cellucci, A.J. (2005). Factors associated with suicide attempts in female inmates: The hegemony of hopelessness. *Suicide and Life-Threatening Behavior*, 35, 558-569.
- Cheng, A.T.A., & Lee, C.S. (2000). Suicide in Asia and the Far East. In K. Hawton & C. Van Heeringen (Eds.), *The International handbook of suicide and attempted suicide* (pp. 121-135). Chichester: John Wiley & Sons.
- Collins, N.L., & Read, S.J. (1990). Adult Attachment, working models and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58, 644-663.
- Compas, B.E., & Phares, V. (1991). Stress during childhood and adolescence: Sources of risk and vulnerability. In E.M. Cummings, A.L. Greene, & K.H. Karraker

- (Eds.), *Lifespan developmental psychology: Perspectives on stress and coping* (pp. 111-129). London: Lawrence Erlbaum Associates.
- Crawford, T.N., Cohen, P., Johnson, J.G., Sneed, J.R., & Brook, J.S. (2004). The course and psychosocial correlates of personality disorder symptoms in adolescence: Erikson's developmental theory revisited. *Journal of Youth and Adolescence, 33*, 373-387.
- Crawford, T.N., Livesley, J.W., Lang, K.L., Shaver, P.R., Cohen, P., & Ganiban, J. (2006). Insecure attachment and personality disorder: A twin study of adults. *European Journal of Personality, 21*, 191-208.
- Crow, L.D., & Crow, A. (1965). *Adolescent development and adjustment*. New York: McGraw-Hill Book Company.
- Day, A.L., & Livingstone, H.A. (2003). Gender differences in perceptions of stressors and utilization of social support among university students. *Canadian Journal of Behavioral Science, 35*, 73-83.
- DeCoster, V.A., & Cummings, S. (2004). Coping with type 2 diabetes: Do race and gender matter? *Social Work Health Care, 4*, 37-53.
- DeGraff, A.H., & Schaffer, J. (2008). Emotion-focused coping: A primary defense against stress for people living with spinal cord injury. *Journal of Rehabilitation, 74*, 19-24.
- Domino, G. (2005). Cross-cultural attitudes towards suicide: The SOQ and a personal odyssey. *Archives of Suicide Research, 9*, 107-122.
- Domino, G., Gibson, L., Poling, S., & Westlake, L. (1980). Students' attitudes towards suicide. *Social Psychiatry, 15*, 127-130.

- Domino, G., MacGregor, J.C., & Hannan, M.T. (1989). Collegiate attitudes towards suicide: New Zealand and United States. *Omega – Journal of Death and Dying ... Paediatric and Perinatal Epidemiology*, 3, 278–301.
- Donson, H. (Ed.). (2008). Annual National Injury Mortality Surveillance System report 2007. Tshwane: MRC-UNISA Crime, Violence & Injury Lead Programme.
- Dransart, D.A.C. (2009). Suicide and gender: A neglected object? Retrieved from http://summer-uni-sw.eesp.ch/fileadmin/user_upload/CV_profs/Pres_Castelli.pdf.
- Durkheim, E. (1951). *Suicide: A study in sociology*. (J. Spaulding, & G. Simpson, Trans.) New York: The Free Press. (Original work published 1897).
- Eisler, R.M., Skidmore, J.R., & Ward, C.H. (1988). Masculine gender role stress: Predictor of anger, anxiety, and health risk behaviors. *Journal of Personality Assessment*, 52, 133-141.
- Erikson, E. (1968). *Identity: Youth and crisis*. USA: W.W. Norton and Company, Inc.
- Evans, S., Tsao, J.C.I., & Zeltzer, L.K. (2008). The role of coping and race in healthy children's experimental pain responses. *Journal of Pain Management*, 1, 151-162.
- Feeney, J.A., & Noller, P. (1990). Attachment styles as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 58, 281-291.
- Feldman, S.S., Gowen, L.K., & Fisher, L. (1998). Family relationships and gender as predictors of romantic intimacy in young adults: A longitudinal study. *Journal of Research on Adolescence*, 8, 263-286.

- Flisher, A. (1999). Mood disorder in suicidal children and adolescents: Recent developments. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 40*, 315-324.
- Flisher, A.J., Liang, H., Laubscher, R., & Lombard, C.F. (2004). Suicide trends in South Africa. *Scandinavian Journal of Public Health, 32*, 411-418.
- Folkman, S. (1991). Coping across the lifespan: Theoretical issues. In E.M. Cummings, A.L. Greene, & K.H. Karraker (Eds.), *Lifespan developmental psychology: Perspectives on stress and coping* (pp. 3-19). London: Lawrence Erlbaum Associates.
- Folkman, S., Chesney, M., McKusick, L., Ironson, G., Johnson, D.S., & Coates, T.J. (1991). Translating coping theory into an intervention. In J. Eckenrode (Ed.), *The social context of coping* (pp. 239-260). New York: Plenum Press.
- Folkman, S., & Lazarus, R.S. (1980). An analysis of coping in a middle aged community sample. *Journal of Health and Social Behavior, 21*, 219-239.
- Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R.J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology, 5*, 992-1003.
- Frydenberg, E. (2004). Coping competencies: What to teach and when. *Theory into Practice, 43*, 14-22.
- Gibb, B.E., Andover, M.S., & Beach, S.R.H. (2006). Suicidal ideation and attitudes toward suicide. *Suicide and Life Threatening Behavior, 36*, 12-18.
- Giesbrecht, N. (1998). Gender patterns of psychosocial development. *Sex Roles: A Journal of Research, 39*, 463-478.

- Gillespie, C.V. (2005). *An exploration of adolescents' problems and ways of coping in a South African context* (Unpublished masters thesis). University of KwaZulu Natal.
- Greening, L., & Stoppelbein, L. (2002). Religiosity, attributional style, and social support as psychosocial buffers for African American and White adolescents' perceived risk for suicide. *Suicide and Life-Threatening Behavior*, 32, 404-417.
- Groholt, B., Ekeberg, O., Wichstrom, L., & Haldorsen, T. (2005). Suicidal and nonsuicidal adolescents: Different factors contribute to self esteem. *Suicide and Life-Threatening Behavior*, 35, 525-535.
- Gullotta, T.P., Adams, G.R., & Ramos, J.M. (Eds.). (2005). *Handbook of adolescent behavioral problems: Evidence-based approaches to prevention and treatment*. Springer: UK.
- Gutierrez, P., King, C.A., & Ghaziuddin, N. (1996). Adolescent attitudes about death in relation to suicidality. *Suicide and Life-Threatening Behavior*, 26, 8-18.
- Hamilton, S., & Fagot, B. (1988). Chronic stress and coping styles: A comparison of male and female undergraduates. *Journal of Personality and Social Psychology*, 55, 819-823.
- Harburg, E., Gleiberman, L., Russell, M., & Cooper, M.L. (1991). Anger-coping styles and blood pressure in Black and White males. *Journal of Psychosomatic Medicine*, 53, 153-164.
- Hawley, G.A. (1988). *Measures of psychosocial development manual*. Odessa, FL: Psychological Assessments Resources.
- Hawton, K. (1992). By their own young hand. *British Medical Journal*, 304, 1000.

- Hawton, K. (2000). Sex and suicide: Gender differences in suicidal behaviour. *British Journal of Psychiatry*, *177*, 484-485.
- Hawton, K., & Harriss, L. (2008). How often does deliberate self-harm occur relative to each suicide: A Study of variations by gender and age. *Suicide and Life-Threatening Behavior*, *38*, 650-660.
- Haycock, J. (1989). Race and suicide in jails and prisons. *Journal of the National Medical Association*, *81*, 405-411.
- Hendrick, S.S., & Hendrick, C. (1992). *Romantic love*. Newbury Park, CA: Sage.
- Hirschfeld, R.M.A., & Blumenthal, S.J. (1986). Personality, life events and other psychosocial factors in adolescent depression and suicide. In G. L. Klerman (Ed.), *Suicide and depression among adolescents and young adults* (pp. 213-253). USA: American Psychiatric Press, Inc.
- Hobfoll, S.E., Dunahoo, D., Ben-Porath, Y., & Monnier, J. (2006). Gender and coping: The dual-axis model of coping. *American Journal of Community Psychology*, *22*, 49-82.
- Holden, C. (1976). Youth suicide: New research focuses on a growing social problem. *Science*, *2*, 839-841.
- Hook, M.K., Gerstein, L.H., Detterich, L., & Gridley, B. (2003). How close are we? Measuring intimacy and examining gender differences. *Journal of Counseling and Development*, *81*, 462-472.
- Horesh, N., Rolnick, T., Iancu, I., Dannon, P., Lepkifker, E., Apter, A., & Kotler, M. (2007). Coping styles and suicide risk. *Acta Psychiatrica Scandinavica*, *93*, 489-493.
- Horner, B., & Fredericks, I. (2005, June 12). Suicide rate among blacks hits new highs: Studies show that more South Africans are taking their own lives than

ever before. *Sunday Times*. Retrieved from <http://www.aegis.com/news/suntimes/2005/ST050607.html>.

Huang, Y.R. (2006). Identity and intimacy crises and their relationship to internet dependence among college students. *CyberPsychology and Behaviour*, 9, 571-576. <http://www.aegis.com/news/suntimes/2005/ST050607.html>.

Hull-Blanks, E.E., Kerr, B.A., & Kurpius, S.E.R. (2004). Risk factors of suicidal ideations and attempts in talented at risk girls. *Suicide and Life-Threatening Behavior*, 34, 267-276.

Hussong, A.M. (2000). Distinguishing mean and structural sex differences in adolescent friendship quality. *Journal of Social and Personal Relationships*, 17, 223-243.

Joe, S., & Marcus, S.C. (2003). Datapoints: Trends by race and gender in suicide attempts among U.S. adolescents, 1991-2001. *Psychiatric Services*, 54, 454.

Joe, S., Stein, D.J., Seedat, S., Herman, A., & Williams, D.R. (2008). Non-fatal suicidal behavior among South Africans: Results from the South African stress and health study. *Social Psychiatry and Psychiatric Epidemiology*, 43, 454-461.

Johnson, J.G. (1993). Relationships between psychosocial development and personality disorder symptomatology in late adolescents. *Journal of Youth and Adolescence*, 27, 33-42.

Josepho, S.A., & Plutchik, R. (1994). Stress, coping, and suicide risk in psychiatric inpatients. *Suicide and Life-Threatening Behavior*, 24, 48-57.

Judd, F., Mijch, A., McCausland, J., & Cockram, A. (1997). Depressive symptoms of patients with HIV infection: A further exploration. *Australian and New Zealand Journal of Psychiatry*, 31, 862-868.

- Kacerguis, M.A., & Adams, G.R. (1980). Erikson stage resolution: The relationship between identity and intimacy. *Journal of Youth and Adolescence*, 9, 117-126.
- Kalichman, S.C., Rompa, D., & Cage, M. (2000). Reliability and validity of self-reported CD4 lymphocyte count and viral load test results in people living with HIV/AIDS. *International Journal of STD & AIDS*, 11, 579-585.
- Kazi, T.B. (2009). *The relationship between religiosity and suicidal tendencies among Muslim tertiary students in South Africa* (Unpublished honour's thesis). University of Kwa-Zulu Natal.
- Kelly, S., & Bunting, J. (1998). Trends in suicide in England and Wales, 1982-1996. *Population Trends*, 92, 29-41.
- Kerr, D.C.R., Owen, L.D., Pears, K.C., & Capaldi, D.M. (2008). Prevalence of suicidal ideation among boys and men assessed annually from ages 9 to 29 years. *Suicide and Life-Threatening Behavior*, 38, 390-402.
- Kgosimore, D.L., & Mafokane, M.D.M. (2006). Self-directed violence: A multidisciplinary approach to the prevention and management of adolescent suicidal behaviour. *Acta Criminologica*, 19, 89-101.
- Kiecolt, K.J., Hughes, M., & Keith, V.M. (2009). Can a high sense of control and John Henryism be bad for mental health? *Sociological Quarterly*, 50, 693.
- Kleinke, C.L. (1998). *Coping with life challenges*. New York: Brooks/Cole Publishing Company.
- Knight, B.G., Silverstein, M., McCallum, T.J., & Fox, L.S. (2000). A sociocultural stress and coping model for mental health outcomes among African American caregivers in Southern California. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 55, 142-150.

- Kocmur, M. (2003). Attitudes towards suicide in Slovenia: A cross-sectional survey. *International Journal of Social Psychiatry, 49*, 8-16.
- Langhinrichsen-Rohling, J., Lewinsohn, P., Rohde, P., Seeley, J., Monson, C.M., Meyer, K.A., et al (1998). Gender differences in the suicide-related behaviors of adolescents and young adults. *Sex Roles, 39*, 839-854.
- Laubscher, L.R. (2003). Suicide in a South African town: A cultural psychological investigation. *South African Journal of Psychology, 33*, 133-143.
- Laux, J.M. (2002). A primer on suicidology: Implications for counsellors. *Journal of Counselling and Development 80*, 380-383.
- Lazarus, R., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.
- Leenaars, A.A., de Wilde, E., Wenckstern, S., & Kral, M. (2001). Suicide notes of adolescents: A lifespan comparison. *Canadian Journal of Behavioural Science, 33*, 47-57.
- Leenaars, A.A., Maris, R.W., & Takahashi, Y. (Eds.). (1997). *Suicide: individual, cultural, international perspectives*. New York: Guilford Press.
- Leenaars, A.A., Wenckstern, S., Sakinofsky, I., Dyck, R.J., Kral, M.J., & Bland, R.C. (Eds.). (1998). *Suicide in Canada*. Toronto, ON: University of Toronto Press.
- Legkaia, K. (2008, May). *Coping and intimacy of women in Antarctica*. Poster accepted for presentation at the UBC undergrad conference, Vancouver, Canada. Retrieved from <http://katyalegkaia.com/documents/WinA%20June%20202008.pdf>.
- Lengua, L.J., & Stormshak, E. (2000). Gender, gender roles, and personality: Gender differences in the prediction of coping and psychological symptoms. *Sex Roles, 43*, 787-820.

- Leserman, J., Perkins, D.O., & Evans, D.L. (1992). Coping with the threat of AIDS: The role of social support. *American Journal of Psychiatry, 149*, 1514-1520.
- Lester, D. (1988). *Suicide from a psychological perspective*. Springfield, Illinois: Charles C. Thomas.
- Levinson, D.J. (1986). Development in the novice phase of early adulthood. In G.L. Klerman (Ed.), *Suicide and depression among adolescents and young adults* (pp. 1-15). USA: American Psychiatric Press, Inc.
- Levinson, D.J., Darrow, C., Klein, E., Levinson, M., & McKee, B. (1978). *The season of a man's life*. New York: Knopf.
- Levy, M.B., & Davis, K.E. (1988). Lovestyles and attachment styles compared: Their relation to each other and to various relationship characteristics. *Journal of Social and Personal Relationships, 5*, 439-471.
- Levy-Tossman, I., Kaplan, A., & Assor, A. (2006). Academic goal orientations, multiple goal profiles, and friendship intimacy among early adolescents. *Contemporary Educational Psychology, 32*, 231-252.
- Li, C.E., DiGiuseppe, R., & Froh, J. (2006). The roles of sex, gender, and coping in adolescent depression. *Journal of Adolescence, 41*, 409-415.
- Lin, N., & Westcott, J. (1991). Marital engagement/disengagement, social networks, and mental health. In J. Eckenrode (Ed.), *The social context of coping* (pp. 213-237). New York: Plenum Press.
- Loots, S. (2008). *The role of exposure to suicide and coping strategies in the suicidal ideation of adolescents* (Unpublished masters thesis). University of the Free State.

- Lopez, A.M., Zhang, K., & Lopez, F.G. (2008). Gender and race: Stereotyping, coping self efficacy and collective self-esteem in the CSET undergraduate pipeline. *Frontiers in Education Conference. FIE 2008. 38th Annual*, 20-25.
- Lyubomirsky, S., & Nolen-Hoeksema, S. (1995). Effects of self-focused rumination on negative thinking and interpersonal problem-solving. *Journal of Personality and Social Psychology*, 69, 176-190.
- MacGregor, K. (2000). Disillusion spreading among black South Africans. Retrieved from <http://www.independent.co.uk/news/world/africa/disillusion-spreading-among-black-south-africans-711223.html>.
- Madu, S.N. (2004). Family environmental factors as correlates for adolescent suicidal behaviours in the Limpopo Province of South Africa. *Social Behaviour and Personality: An International Journal*, 32, 341-353.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), *Growing points of attachment theory and research* (pp. 66-104). *Monograph of the Society for Research in Child Development*, 50 (1-2, Serial No. 209).
- Manton, K.G., Blazer, D.G., & Woodbury, M.A. (1987). Suicide in middle age and later life: Sex and race specific life table and cohort analyses. *Journal of Gerontology*, 42, 219-227.
- Marcia, J.E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159-187). New York: Wiley.
- Maris, R.F.W. (1991). Introduction to a special issue: Assessment and prediction of suicide. *Suicide and Life-Threatening Behavior*, 21, 1-17.

- Maris, R.W., Berman, A.L., Silverman, M.M., & Bongar, B.M. (2000). *The comprehensive text book of suicidology*. Guilford Press
- Marusic, A. & Goodwin, R.D. (2006). Suicidal and deliberate self-harm ideation among patients with physical illness: The role of coping styles. *Suicide and Life-Threatening Behavior* 36, 323-328.
- Matud, M.P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37, 1401-1415.
- McAdams, D.P. (1989). *Intimacy: The need to be close*. New York: Doubleday.
- McBee-Strayer, S.M., & Rogers, J.R. (2002). Lesbian, gay and bisexual suicidal behavior: Testing a constructivist model. *Suicide and Life-Threatening Behavior*, 32, 272-283.
- Meacham, J.A., & Santilli, N.R. (1982). Interstage relationships in Erikson's theory: Identity and intimacy. *Child Development*, 53, 1461-1467.
- Meehan, S.A., Peirson, A., & Fridjhon, P. (2007). Suicide ideation in adolescent South Africans: The role of gender and coping strategies. *South African Journal of Psychology*, 37, 552-575.
- Meel, B.L. (2003a). A study on the incidence of suicide by hanging in the sub region of Transkei, South Africa. *Journal of Clinical Forensic Medicine*, 10, 153-157.
- Meel, B.L. (2003b). Suicide and HIV/AIDS in Transkei, South Africa. *Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology*, 4, 1-11.
- Meer, F. (1976). *Race and suicide in South Africa*. Boston: Routledge & Kegan.
- Memela, S. (2008, February 19). Callous 'Black diamonds' and the poor White problem. *Mail and Guardian*. Retrieved from

<http://www.thoughtleader.co.za/sandilememela/2008/02/19/callous-black-diamonds-and-the-poor-white-problem/>.

Messina, J., & Messina, C. (2007). *Coping.Org: Tools for coping with life's stressors*.

Retrieved from <http://www.coping.org/growth/esteem.htm#Steps>.

Mikulincer, M., & Erev, I. (1991). Attachment style and the structure of romantic love. *British Journal of Social Psychology, 30*, 273-291.

Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. Simpson & S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 143-165). New York: Guilford.

Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. *Journal of Personality and Social Psychology, 61*, 321-332.

Morrow, J., & Nolen-Hoeksema, S. (1990). Effects of responses to depression on the remediation of depressive affect. *Journal of Personality and Social Psychology, 58*, 519-527.

Moscicki, E.K. (1997). Identification of suicide risk factors using epidemiologic studies. *Psychiatric Clinics of North America, 20*, 499-517.

Mundell, J.P. (2006). *The impact of structured support groups for pregnant women living with HIV* (Unpublished master's thesis). University of Pretoria.

Murphy, G.E. (1998). Why women are less likely than men to commit suicide. *Comprehensive Psychiatry, 39*, 165-175.

Murray, S. (2008). *The relationship between life satisfaction, religiosity and suicidal tendencies amongst undergraduate students in South Africa* (Unpublished honour's thesis). University of KwaZulu-Natal.

- Nada-Raja, S., Skegg, K., Langley, J., Morrison, D., & Sowerby, P. (2004). Self-harmful behaviors in a population-based sample of young adults. *Suicide and Life-Threatening Behavior*, 34, 177-186.
- National Adolescent Health Information Center. (2006). *Fact sheet on suicide: Adolescents & young adults*. San Francisco, CA: Author, University of California, San Francisco.
- Newman, L. (2004, September 13). South Africa's shocking suicide statistics. *The Mercury*. Retrieved from http://www.iol.co.za/general/news/newsprint.php?art_id=vn20040913065003446C177172&sf=
- Neuman, L. (1997). *Social Research Methods: Qualitative and quantitative approaches*. USA: Allyn & Bacon.
- Nolen-Hoeksema, S., Larson, J., & Grayson, C. (1999). Explaining the gender differences in depressive symptoms. *Journal of Personality and Social Psychology*, 77, 1061-1072.
- O'Carroll, P.W., Berman, A.L., Maris, R.W., Moscicki, E.K., Tanney, B.L., & Silverman, M.M. (1996). Beyond the tower of Babel: A nomenclature for suicidology. *Suicide and Life-Threatening Behavior*, 26, 237-252.
- O'Connor, R., & Sheehy, N. (2000). *Understanding suicidal behaviour*. London: The British Psychological Society.
- Orbach, I. (1988). *Children who don't want to live: Understanding and treating the suicidal child*. London: Jossey-Bass Publishers.
- Orbach, I., Milstein, I., Har-Even, D., Apter, A., Tiano, S., & Elizur, A. (1991). A multi-attitude suicide tendency scale for adolescents. *Psychological assessment: A Journal of Consulting and Clinical Psychology*, 3, 389-404.

- Orbach, I., Mikulincer, M., Gilboa-Schechtman, E., & Sirota, P. (2003). Mental pain and its relationship to suicidality and life meaning. *Suicide and Life-Threatening Behaviour, 33*, 231-241.
- Osman, A., Barrios, F.X., Grittmann, L.R., & Osman, J.R. (1993). The multi-attitude suicide tendency scale: Psychometric characteristics in an American Indian sample. *Journal of Clinical Psychology, 49*, 701-708.
- Paul, E.L., Poole, A., & Jakubowyc, N. (1998). Intimacy development and romantic stage status: Implications for adjustment to the college transition. *Journal of College Student Development, 39*, 75-86.
- Park, J.H., Essex, M.J., Zahn-Waxler, C., Armstrong, J.M., Klein, M.H., & Goldsmith, H.H. (2005). Relational and overt aggression in middle childhood: Early child and family risk factors. *Early Education and Development, 16*, 233-256.
- Parker, J.G., & Asher, S.R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin, 102*, 357-389.
- Parmar, S.P. (2001). *The impact of race upon coping and social support among African American and Caucasian parents of children with developmental disabilities* (Unpublished master's thesis). University of Cincinnati.
- Peltzer, K., Cherian, V.I., & Cherian, L. (2000). Cross-cultural attitudes towards suicide among South African secondary school pupils. *East African Medical Journal, 77*, 165-167.
- Penley, J.A., Tomaka, J., & Wiebe, J.S. (2002). The association of coping to physical and psychological health outcomes: A meta-analytic review. *Journal of Behavioral Medicine, 25*, 551-603.

- Petersen, A.C., & Craighead, W.E. (1986). Emotional and personality development in normal adolescents and young adults. In G.L. Klerman (Ed.), *Suicide and depression among adolescents and young adults* (pp. 17-52). USA: American Psychiatric Press, Inc.
- Portes, P.R., Sandhu, D.S., & Longwell-Grice, R. (2002). Understanding adolescent suicide: A psychosocial interpretation of developmental and contextual factors. *Adolescence*, *37*, 805-814.
- Pyszczynski, T., & Greenber, J. (1987). Self-regulatory presentation and the depressive self-focusing style: A self-awareness theory of reactive depression. *Psychological Bulletin*, *102*, 122-138.
- Ramgoon, S., Bachoo, S., Patel, C.J., & Paruk, Z. (2006). Could a healthy ego identity serve as a protective factor against suicidal tendencies? A pilot study. *Journal of Child and Adolescent Mental Health*, *18*, 49-54.
- Ramgoon, S., Patel, C.J., & Paruk, Z. (2009). Preliminary validation of the Multi-attitude suicide tendency (MAST) scale using a South African adolescent sample. *Journal of Adolescent Mental Health*, *21*, 1-7.
- Range, L.M. (1993). Suicide prevention: Guidelines for schools. *Educational Psychology Review*, *5*, 135-154.
- Ransom, S., Jacobsen, P.B., Schmidt, J.E., & Andrykowski, M.A. (2005). Relationship of problem-focused coping strategies to changes in quality of life following treatment for early stage breast cancer. *Journal of Pain and Symptom Management*, *30*, 243-253.
- Rohland, B.M. (1998). *CMHC Survey-Preliminary Report*. Iowa City: Human Sciences Press, Inc.

- Savin-Williams, R., & Brendt, T. (1990). Friendship and peer relations. In S. Feldman and G. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 277-307). Cambridge: Harvard University Press.
- Serote, A.C. (2007). The future of blackness in predominantly white milieus: how blackness found and lost its place in the academy. Paper presented on 03 October 2007 at the *Centre for African Studies, University of Cape Town*.
- Schlebusch, L. (2004). Perspectives on suicidal behaviour. In S. Suffla & A. Van Niekerk (Eds.), *Crime, violence and injury prevention in South Africa: Developments and challenges* (pp. 88-113). Cape Town: Medical Research Council.
- Schlebusch, L. (2005). *Suicidal behaviour in South Africa*. Scottsville: University of KwaZulu-Natal Press.
- Schlebusch, L., Vawda, N.B.M., & Bosch, B.A. (2003). Suicidal behaviour in Black South Africans. *Crisis, 24*, 24-28.
- Seiffge-Krenke, I. (2004). Adaptive and maladaptive coping styles: Does intervention change anything? *European Journal of Developmental Psychology, 1*, 367-382.
- Shapka, J.D., & Keating, D.P. (2005). Structure and change in self-concept during adolescence. *Canadian Journal of Behavioral Sciences, 37*, 83-96.
- Shimazu, A., & Schaufeli, W.B. (2007). Does distraction facilitate problem-focused coping with job stress: A 1 year longitudinal study. *Journal of Behavioral Medicine, 30*, 423-434.
- Silverman, M.M. (2006). The language of suicidology. *Suicide and Life-Threatening Behavior, 36*, 519-532.

- Smith, J.M., Alloy, L.B., & Abramson, L.Y. (2006). Cognitive vulnerability to depression, rumination, hopelessness and suicidal ideation: Multiple pathways to self-injurious thinking. *Suicide and Life-Threatening Behavior*, 36, 443-454.
- South African Depression and Anxiety Group (SADAG). (2006). *Suicide Treatment and Referral Guide*. Retrieved from http://www.sadag.co.za/index.php?option=com_content&task=view&id=47&Itemid=60#fats.
- Spann, M., Molock, S.D., Barksdale, C., Matlin, S., & Puri, R. (2006). Suicide and African American teenagers: Risk factors and coping mechanisms. *Suicide and Life-Threatening Behavior*, 36, 553-568.
- Speckens, A.E.M., & Hawton, K. (2005). Social problem solving in adolescents with suicidal behavior: A systematic review. *Suicide and Life-Threatening Behavior*, 35, 365-387.
- Spirito, A., Overholser, J., & Stark (1989). Common problems and coping strategies II: Findings with adolescent suicide attempters. *Journal of Abnormal Child Psychology*, 17, 213-221.
- Sroufe, L.A. (1983). Infant-caregiver attachment and patterns of adaptation in preschool: The roots of maladaptation and competence. In M. Perlmutter (Ed.), *Minnesota Symposium in Child Psychology*, 16, 41-83. Hillsdale, NJ: Erlbaum Associates.
- Stein, D., Brom, D., Elizur, A., & Witztum, E. (1998). The association between attitudes toward suicide and suicidal ideation in adolescents. *Acta Psychiatrica Scandinavica*, 97, 195-201.

- Stepp, S.D., Morse, J.Q., Yaggi, K.E., Reynolds, S.K., Reed, L.I., & Pilkonis, P.A. (2008). The role of attachment styles and interpersonal problems in suicide-related behaviors. *Suicide and Life-Threatening Behavior*, 38, 592-607.
- Stillion, J.M., McDowell, E.E., & May, J.H. (1989). *Suicide across the lifespan: Premature exits*. New York: Hemisphere Publishing Corporation.
- Strutton, D., & Lumpkin, J.R. (1994). Problem and emotion-focused coping dimensions and sales presentation effectiveness. *Journal of the Academy of Marketing Science*, 22, 28-37.
- Van Orden, K.A., Witte, T.K., James, L.M., Castro, Y., Gordon, K.H., Braithwaite, S.R., Hollar, D.L., & Joiner, T.E., Jr. (2008). Suicidal ideation in college students varies across semesters: The mediating role of belongingness. *Suicide and Life-Threatening Behavior*, 38, 427-436.
- Vivona, J.M. (1996). Suicidal ideation, object relations, and early experiences: An investigation using structural equation modeling. *Electronic Doctoral Dissertations for UMass Amherst*. Paper AAI9639047. Retrieved from <http://scholarworks.umass.edu/dissertations/AAI9639047>.
- Vosvick ,M., Gore-Felton, C., Koopman, C., Thoresen, C., Krumboltz, J., & Spiegel, D. (2002). Maladaptive coping strategies in relation to quality of life among HIV+ adults. *AIDS and Behavior*, 6, 97-106.
- Ward, C.A., Bochner, S., & Furnham, A. (2001). *The psychology of culture shock*. USA: Routledge.
- Wallin, U., & Runeson, B. (2003). Attitudes towards suicide and suicidal patients among medical students. *European Psychiatry*, 18, 329-333.
- Wasserman, D., Cheng, Q., & Jiang, G.X. (2005). Global suicide rates among young people aged 15-19. *World Psychiatry*, 4, 114-120.

- Weinstein, F.M., Healy, C.C., & Ender, P.B. (2002). Career choice anxiety, coping, and perceived control. *The Career Development Quarterly*, *50*, 339-349.
- Weyrauch, K.F., Roy-Byrne, P., Katon, W., & Wilson, L. (2001). Stressful life events and impulsiveness in failed suicide. *Suicide and Life-Threatening Behavior*, *31*, 311-319.
- Wild, L., Flisher, A.J., Lombard, C., & Bhana, A. (2004). Substance abuse, suicidality and self-esteem in South African adolescents. *Journal of Drug Education*, *34*, 1-17.
- Wild, L., Flisher, A.J., & Lombard, C. (2004). Suicidal ideation and attempts in adolescents: Associations with depression and six domains of self-esteem. *Journal of Adolescence*, *27*, 611-624.
- Zaporozan, B.J. (1999). *Marital adjustment and the empty nest* (Unpublished master's thesis). Trinity Western University.
- Zarabatany, R., Conley, R., & Pepper, S. (2004). Personality and gender differences in friendship needs and experiences in preadolescence and young adulthood. *International Journal of Behavioral Development*, *28*, 299-310.
- Zemaitiene, N., & Zaborskis, A. (2005). Suicidal tendencies and attitude towards freedom to choose suicide among Lithuanian schoolchildren: Results from three cross-sectional studies in 1994, 1998, and 2002. *BMC Public Health*, *5*, 1-9.
- Zhang, J., & Jin, S. (1998). Interpersonal relations and suicidal ideation in China. *Genetic Social and General Psychological Monographs*, *124*, 79-94.
- Zuschlag, M.K., & Whitbourne, S.K. (1994). Psychosocial development in three generations of college students. *Journal of Youth and Adolescence*, *23*, 567-577.

APPENDICES

Appendix A

Participant Informed Consent Form

Title of the Study:

An exploration of the interrelationship between intimacy resolution, coping styles and suicidal attitudes among a sample of university students.

Researcher:

This study is being conducted by Mimi Zulu, a Masters (Counselling Psychology) student at the University of KwaZulu Natal, under the supervision of Saroj Ramgoon.

1. Purpose of Research:

The purpose of this study is to explore the interrelationship between intimacy resolution, coping styles and suicidal attitudes among university students.

2. Procedures:

As a participant in this study, you will be requested to complete three (3) self report questionnaires. The MAST is a measure of suicidal tendencies. The MPD is a measure of ego development and stage resolution and the Brief COPE Inventory is a measure of coping styles. It is anticipated that this process will not take longer than 45 minutes, and you are free to leave as soon as you have completed the questionnaires.

3. Risks and Benefits:

Your participation in this research is highly valued. Every questionnaire that is completed will have great significance for the outcomes of this research and will contribute towards an understanding of developmental resolution and suicide risk behaviours.

It is likely that following completion of this questionnaire booklet, you may feel the need to speak to somebody about some of the issues pertaining to your feelings and thoughts about suicide. The researcher and her supervisor would like you to know that there are Student Counselling Services available on campus that have members of staff that are well trained in dealing with issues such as these and who would be happy to talk to or counsel you.

4. Anonymity and Confidentiality:

Your participation in this study is anonymous. Your name will not be included in the questionnaire nor in the dissemination of the results. Only information regarding your sex, age and race will be included. Information from the questionnaires will be kept confidential. Only the researcher and her supervisor will have access to the questionnaires. Upon completion of this study, all questionnaires will be destroyed.

5. Compensation:

There is no compensation provided for your participation in this study, except for our gratitude and appreciation for taking the time to contribute to this research. Should you wish to find out about the outcomes and results of this study you are welcome to contact the researcher or her supervisor.

6. Freedom to Withdraw:

If at any time you choose not to continue your participation in this study, you have the right to withdraw your consent.

7. Approval of Research:

This research project has been approved, as required, by the Department of Psychology at the University of KwaZulu Natal.

8. Participant's Responsibilities:

I voluntarily agree to participate in this study. I have the following responsibilities:

- Complete this informed consent form without duress
- Complete the Questionnaire Booklet
- Return the Questionnaire Booklet to the Researcher

9. Participant's Permission:

I have read and understand the Informed Consent Form, which states the conditions of this research project. I hereby acknowledge the above and give my voluntary consent for participation in this project.

If I participate, I may withdraw at any time without penalty. I agree to abide by the rules of this project.

Participant's Signature

Date

Should I have any questions about this research or its conduct, I may contact:

Mimi Zulu

(031) xxx xxxx

Researcher

Saroj Ramgoon

(031) xxx xxxx

Supervisor

Appendix B

Demographic Questionnaire

DEMOGRAPHIC QUESTIONNAIRE

Please provide the following information

1. Age: _____
2. Gender: _____
3. Race*: _____

* For statistical purposes only

Appendix C

The Multi-Attitude Suicidal Tendencies Scale (MAST)

Respond to each of the following items by placing the corresponding number that best applies to your response below.

1 Strongly agree	2 Agree	3 Neutral	4 Disagree	5 Strongly agree
---------------------	------------	--------------	---------------	---------------------

1. Most of the time I feel happy.	
2. Life seems to be one long and difficult struggle.	
3. I fear the idea that there is no return from death.	
4. I fear death because all my mental and spiritual activity will stop.	
5. Even though things may be tough at times I think it's worth living.	
6. I feel that close people make me feel good.	
7. I fear death because my identity will disappear.	
8. I know people who have died and I believe I will meet them when I die.	
9. I don't ask for help even when things are very tough for me.	
10. Thinking about death gives me the shivers.	
11. I am afraid of death because my body will rot.	
12. I fear death because it means that I will not be able to experience and think anymore.	
13. I can see myself as being very successful in the future.	
14. I feel that I am not important to my family.	
15. Sometimes I feel that my family will be better off without me.	
16. Sometimes I feel that my problems can't be solved.	
17. Death can change things for the better.	
18. I like to do many things.	
19. Death is actually eternal life.	
20. The thought that one day I will die frightens me.	
21. I don't like to spend time with my family.	
22. Many problems can be solved by death only.	
23. I believe death can bring a great relief for suffering.	
24. I fear death because all my plans will come to an end.	
25. I am very hopeful.	
26. In some situations it is better to die than to go on living.	
27. Death can be a state of rest and calm.	
28. I enjoy many things in life.	
29. Death frightens me more than anything else.	
30. No one really loves me.	

Appendix D

Identity (R5) and Intimacy (R6) Resolution Scales

The following questions contain statements or phrases which people often use to describe themselves, their lives, and their experiences. For each statement, circle the response, which best represents, your opinion, making sure that you circle the correct letter.

1 Not at all like you	2 Not much like you	3 Somewhat like you	4 Like you	5 Very much like you
--------------------------	------------------------	------------------------	---------------	-------------------------

1. Have worked out my basic beliefs about such matters as occupation, sex, family, politics, religion, etc.	
2. Warm and understanding.	
3. Not sure about my basic convictions.	

4. Prefer doing most things alone.	
5. Clear vision of what I want out of life.	
6. Share my most private thoughts and feelings with those close to me.	
7. A bundle of contradictions.	
8. Keep my feelings to myself.	
9. Stand up for what I believe, even in the face of adversity.	
10. Others share their most private thoughts and feelings with me.	
11. Wide gap between the person I am and the person I want to be.	
12. No one seems to understand me.	
13. Found my place in the world.	
14. Comfortable in close relationships.	
15. Uncertain about what I'm going to do with my life.	
16. Emotionally distant.	
17. Others see me pretty much as I see myself.	
18. Willing to give and take in my relationships.	
19. Haven't found my place in life.	
20. Avoid commitment to others.	
21. Appreciate my own uniqueness and individuality.	
22. Others understand me.	
23. A mystery – even to myself.	
24. Many acquaintances; no real friends.	
25. Content to be who I am.	
26. There when my friends need me.	
27. In search of my identity.	
28. Wary of close relationships.	

Appendix E

The Brief COPE

This questionnaire asks you to indicate what you generally do and feel when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress. Respond to each of the following items by placing the corresponding number that best applies to your response below.

1 I haven't been doing this at all	2 I've been doing this a little bit	3 I've been doing this a medium amount	4 I've been doing this a lot
--	---	--	------------------------------------

1. I've been turning to work or other activities to take my mind off things.	
2. I've been concentrating my efforts on doing something about the situation I'm in.	
3. I've been saying to myself "this isn't real".	
4. I've been using alcohol or other drugs to make myself feel better.	
5. I've been getting emotional support from others.	
6. I've been giving up trying to deal with it.	
7. I've been taking action to try to make the situation better.	
8. I've been refusing to believe that it has happened.	
9. I've been saying things to let my unpleasant feelings escape.	
10. I've been getting help and advice from other people.	
11. I've been using alcohol or other drugs to help me get through it.	
12. I've been trying to see it in a different light, to make it seem more positive.	
13. I've been criticizing myself.	
14. I've been trying to come up with a strategy about what to do.	
15. I've been getting comfort and understanding from someone.	
16. I've been giving up the attempt to cope.	
17. I've been looking for something good in what is happening.	
18. I've been making jokes about it.	
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	
20. I've been accepting the reality of the fact that it has happened.	
21. I've been expressing my negative feelings.	
22. I've been trying to find comfort in my religion or spiritual beliefs.	
23. I've been trying to get advice or help from other people about what to do.	
24. I've been learning to live with it.	
25. I've been thinking hard about what steps to take.	
26. I've been blaming myself for things that happened.	
27. I've been praying or meditating.	
28. I've been making fun of the situation.	